WEST Search History

Hide Items | Restore | Clear | Cancel

DATE: Thursday, July 08, 2004

Hide?	Set Name	Query	Hit Count
		DB=PGPB,USPT,EPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=ADJ	
☐	L2	oil adj bod$ same (ligand? or molecule? or protein?) and covalent$ and (isolat$ or purif$ or separat$)	39
☐	L1	oil adj bod$ same (ligand? or molecule? or protein?) same covalent$ and (isolat$ or purif$ or separat$)	18

END OF SEARCH HISTORY

Hit List

Your wildcard search against 10000 terms has yielded the results below.

Your result set for the last L# is incomplete.

The probable cause is use of unlimited truncation. Revise your search strategy to use limited truncation.

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 39 of 39 returned.

☐ 1. Document ID: US 20040096861 A1

Using default format because multiple data bases are involved.

L2: Entry 1 of 39 File: PGPB May 20, 2004

PGPUB-DOCUMENT-NUMBER: 20040096861
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040096861 A1

TITLE: Oryza sativa nuclear cap binding protein 80

PUBLICATION-DATE: May 20, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kreps, Joel	Carlsbad	CA	US	
Neru, Pamela S.	Philadelphia	PA	US	

US-CL-CURRENT: 435/6; 435/320.1, 435/419, 435/69.1, 530/370, 536/23.6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 2. Document ID: US 20040092017 A1

L2: Entry 2 of 39 File: PGPB May 13, 2004

PGPUB-DOCUMENT-NUMBER: 20040092017
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040092017 A1

TITLE: Binary viral expression system in plants

PUBLICATION-DATE: May 13, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Yadav, Narendra S.	Chadds Ford	PA	US	
Falco, Saverio Carl	Wilmington	DE	US	

US-CL-CURRENT: 435/456; 435/235.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 3. Document ID: US 20040081654 A1

L2: Entry 3 of 39 File: PGPB Apr 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040081654
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040081654 A1

TITLE: Use of plant oil-bodies in vaccine delivery systems

PUBLICATION-DATE: April 29, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schryvers, Anthony B	Alberta		CA	
Hutchins, Wendy A	Alberta		CA	
Moloney, Maurice M	Alberta		CA	
Alcantra, Joenel	Calgary		CA	

US-CL-CURRENT: 424/184.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 4. Document ID: US 20040016025 A1

L2: Entry 4 of 39 File: PGPB Jan 22, 2004

PGPUB-DOCUMENT-NUMBER: 20040016025
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040016025 A1

TITLE: Rice promoters for regulation of plant expression

PUBLICATION-DATE: January 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Budworth, Paul	San Diego	CA	US	
Moughamer, Todd	San Diego	CA	US	
Briggs, Steven P.	Del Mar	CA	US	
Cooper, Bret	La Jolla	CA	US	
Glazebrook, Jane	San Diego	CA	US	
Goff, Stephen Arthur	Encinitas	CA	US	
Katagiri, Fumiaki	San Diego	CA	US	
Kreps, Joel	Carlsbad	CA	US	

Provart, Nicholas	Toronto	CA	CA
Ricke, Darrell	San Diego	CA	US
Zhu, Tong	San Diego		US

US-CL-CURRENT: 800/287; 435/320.1, 435/419, 800/312, 800/320, 800/320.1, 800/320.2, 800/320.3

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 5. Document ID: US 20040010817 A1

L2: Entry 5 of 39 File: PGPB Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040010817
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040010817 A1

TITLE: Plant acyl-CoA synthetases

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shockey, Jay M.	Mandeville	LA	US	
Schnurr, Judy	Coon Rapids	MN	US	
Browse, John A.	Palouse	WA	US	

US-CL-CURRENT: 800/281; 435/193, 435/320.1, 435/419, 435/69.1, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 6. Document ID: US 20040010815 A1

L2: Entry 6 of 39 File: PGPB Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040010815
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040010815 A1

TITLE: Identification and characterization of plant genes

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lange, B. Markus	San Diego	CA	US	
Ghassemian, Majid	Carlsbad	CA	US	
Briggs, Steven P.	Del Mar	CA	US	
Cooper, Bret	La Jolla	CA	US	
Glazebrook, Jane	San Diego	CA	US	

Goff, Stephen Arthur	Encinitas	CA	US
Katagiri, Fumiaki	San Diego	CA	US
Kreps, Joel	Carlsbad	CA	US
Moughamer, Todd	San Diego	CA	US
Provart, Nicholas	Toronto	CA	CA
Ricke, Darrell	San Diego	CA	US
Zhu, Tong	San Diego		US

US-CL-CURRENT: 800/278; 435/193, 435/419, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 7. Document ID: US 20040009185 A1

L2: Entry 7 of 39 File: PGPB Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040009185
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040009185 A1

TITLE: Enhancing the immune response to an antigen by presensitzing with an inducing agent prior to immunizing with the agent and the antigen

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Emtage, Peter	Boston	MA	US	
Barber, Brian H.	Mississauga	CA	US	
Sambhara, Suryprakash	Decatur	GA	US	
Sia, Charles Dwo Yuan	Toronto		CA	

US-CL-CURRENT: 424/185.1; 424/236.1, 424/239.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 8. Document ID: US 20030211511 A1

L2: Entry 8 of 39 File: PGPB Nov 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030211511
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030211511 A1

TITLE: Nucleic acids and proteins with thioredoxin reductase activity

PUBLICATION-DATE: November 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47

Briggs, Steven P.	Del Mar	CA	US
Dalmia, Bipin K.	San Diego	CA	US
del Val, Greg	Encinitas	CA	US
Desjarlais, John R.	Pasadena	CA	US
Heifetz, Peter	San Diego	CA	US
Luginbuhl, Peter	San Diego	CA	US
Muchhal, Umesh	Monrovia	CA	US

US-CL-CURRENT: 435/6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 9. Document ID: US 20030170293 A1

L2: Entry 9 of 39 File: PGPB Sep 11, 2003

PGPUB-DOCUMENT-NUMBER: 20030170293
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030170293 A1

TITLE: Thermotolerant phytase for animal feed

PUBLICATION-DATE: September 11, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lanahan, Michael B.	Morrisville	NC	US	
Betts, Scott	Durham	NC	US	

US-CL-CURRENT: 424/442; 435/196

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 10. Document ID: US 20030167531 A1

L2: Entry 10 of 39 File: PGPB Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030167531
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030167531 A1

TITLE: Expression and purification of bioactive, authentic polypeptides from plants

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Russell, Douglas A.	Madison	WI	US	
Schlittler, Michael	Wildwood	MO	US	

US-CL-CURRENT: 800/288; 530/351

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 11. Document ID: US 20030167524 A1

L2: Entry 11 of 39 File: PGPB Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030167524
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030167524 A1

TITLE: Methods for the production of multimeric protein complexes, and related compositions

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rooijen, Gijs Van	Alberta	CA	CA	
Zaplachinski, Steven	Alberta	CA	CA	
Heifetz, Peter-Bernard	San Diego	CA	US	
Briggs, Steven	Del Mar	CA	US	
Dalmia, Bipin Kumar	San Diego		US	
Val, Greg Del	San Diego		US	

US-CL-CURRENT: 800/281; 435/419

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 12. Document ID: US 20030135888 A1

L2: Entry 12 of 39 File: PGPB Jul 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030135888
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030135888 A1

TITLE: Genes that are modulated by posttranscriptional gene silencing

PUBLICATION-DATE: July 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Zhu, Tong	San Diego	CA	US	
Wang, Xun	San Diego	CA	US	
Chang, Hur-Song	San Diego	CA	US	
Briggs, Steven P.	Del Mar	CA	US	
Cooper, Bret	La Jolla	CA	US	
Glazebrook, Jane	San Diego	CA	US	

Goff, Stephen A.	Encinitas	CA	US
Katagiri, Fumiaki	San Diego	CA	US
Kreps, Joel	Carlsbad	CA	US
Moughamer, Todd	San Diego	CA	US
Provart, Nicholas	Toronto	CA	CA
Ricke, Darrell	San Diego		US

US-CL-CURRENT: 800/288; 435/320.1, 435/419, 536/23.2, 800/306, 800/320, 800/320.1, 800/320.2, 800/320.3

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 13. Document ID: US 20030135885 A1

L2: Entry 13 of 39 File: PGPB Jul 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030135885
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030135885 A1

TITLE: Self-processing plants and plant parts

PUBLICATION-DATE: July 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lanahan, Michael B.	Research Triangle Park	NC	US	
Basu, Shib Sankar	Apex	NC	US	
Batie, Christopher J.	Durham	NC	US	
Chen, Wen	Cary	NC	US	
Craig, Joyce	Pittsboro	NC	US	
Kinkema, Mark	Durham	NC	US	

US-CL-CURRENT: 800/284; 435/200, 435/320.1, 435/419, 435/6, 435/69.1, 536/23.2, 800/294

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 14. Document ID: US 20030100743 A1

L2: Entry 14 of 39 File: PGPB May 29, 2003

PGPUB-DOCUMENT-NUMBER: 20030100743
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030100743 A1

TITLE: Nucleic acids and proteins with thioredoxin reductase activity

PUBLICATION-DATE: May 29, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Dalmia, Bipin K.	San Diego	CA	US	
Briggs, Steven P.	Del Mar	CA	US	
Val, Greg del	Encinitas	CA	US	
Desjarlais, John R.	Pasadena	CA	US	
Heifetz, Peter	San Diego	CA	US	
Luginbuhl, Peter	San Diego	CA	US	
Muchhal, Umesh	West Covina	CA	US	

US-CL-CURRENT: 536/23.1; 435/4, 530/300

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 15. Document ID: US 20030097676 A1

L2: Entry 15 of 39 File: PGPB May 22, 2003

PGPUB-DOCUMENT-NUMBER: 20030097676
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030097676 A1

TITLE: Plant acyl-CoA synthetases

PUBLICATION-DATE: May 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shockey, Jay M.	Pullman	WA	US	
Schnurr, Judy	Pullman	WA	US	
Browse, John A.	Pullman	WA	US	

US-CL-CURRENT: 800/278; 435/320.1, 435/419, 536/23.6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 16. Document ID: US 20030096320 A1

L2: Entry 16 of 39 File: PGPB May 22, 2003

PGPUB-DOCUMENT-NUMBER: 20030096320
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030096320 A1

TITLE: Oil bodies and associated proteins as affinity matrices

PUBLICATION-DATE: May 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47

Moloney, Maurice	Calgary	CA
Boothe, Joseph	Calgary	CA
Van Rooijen, Gijs	Calgary	CA

US-CL-CURRENT: 435/7.5; 530/370, 530/400

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Draw Desc | Image

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☐ 17. Document ID: US 20030093832 A1

L2: Entry 17 of 39 File: PGPB May 15, 2003

PGPUB-DOCUMENT-NUMBER: 20030093832
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030093832 A1

TITLE: Methods for the production of multimeric immunoglobulins, and related compositions

PUBLICATION-DATE: May 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Szarka, Steven	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	
Moloney, Maurice	Calgary		CA	

US-CL-CURRENT: 800/281; 435/419, 530/388.26, 800/288

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWMC | Draw Desc | Image

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☐ 18. Document ID: US 20030074689 A1

L2: Entry 18 of 39 File: PGPB Apr 17, 2003

PGPUB-DOCUMENT-NUMBER: 20030074689
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030074689 A1

TITLE: Methods for improving seed characteristics

PUBLICATION-DATE: April 17, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Tarczynski, Mitchell C.	West Des Moines	IA	US	
Olsen, Odd-Arne	Johnston	IA	US	
Shen, Bo	Johnston	IA	US	
Lid, Stein E.	As	IA	NO	
Li, Changjiang	Urbandale	IA	US	

Jung, Rudolf	Des Moines	IA	US
Gruis, Darren B.	Des Moines	IA	US
Lorentzen, Jennifer A.	Des Moines	IA	US
Ananiev, Evgueni	Johnston	PA	US
Nichols, Scott E.	Westchester	IA	US
Wang, Cunxi	Johnston		US

US-CL-CURRENT: 800/278; 800/312, 800/320, 800/320.1, 800/320.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 19. Document ID: US 20030059910 A1

L2: Entry 19 of 39 File: PGPB Mar 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030059910
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030059910 A1

TITLE: Oil bodies and associated proteins as affinity matrices

PUBLICATION-DATE: March 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Moloney, Maurice	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	

US-CL-CURRENT: 435/183; 424/192.1, 424/193.1, 530/413

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 20. Document ID: US 20030059802 A1

L2: Entry 20 of 39 File: PGPB Mar 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030059802
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030059802 A1

TITLE: Nucleic acid and protein sequences of bovine epidermal growth factor

PUBLICATION-DATE: March 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Bilodeau-Goeseels, Sylvie	Lethbridge		CA	
John, Sushil Jacob	Lethbridge		CA	

Selinger, Leonard Brent	Lethbridge	CA
Benkel, Bernhard F.	Lethbridge	CA

US-CL-CURRENT: 435/6; 435/320.1, 435/325, 435/69.1, 530/399, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 21. Document ID: US 20030037357 A1

L2: Entry 21 of 39 File: PGPB Feb 20, 2003

PGPUB-DOCUMENT-NUMBER: 20030037357
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030037357 A1

TITLE: Plant acyl-CoA synthetases

PUBLICATION-DATE: February 20, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Shockey, Jay M.	Pullman	WA	US	
Schnurr, Judy	Pullman	WA	US	
Browse, John A.	Pullman	WA	US	

US-CL-CURRENT: 800/278; 435/320.1, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 22. Document ID: US 20020182690 A1

L2: Entry 22 of 39 File: PGPB Dec 5, 2002

PGPUB-DOCUMENT-NUMBER: 20020182690
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020182690 A1

TITLE: POLYHYDROXYALKANOATE BIOSYNTHESIS ASSOCIATED PROTEINS AND CODING REGION IN BACILLUS MEGATERIUM

PUBLICATION-DATE: December 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
CANNON, MAURA C.	AMHERST	MA	US	
CANNON, FRANCIS C.	AMHERST	MA	US	
MCCOOL, GABRIEL J.	NORTHAMPTON	MA	US	
VALENTINE, HENRY E.	CHESTERFIELD	MO	US	
GRUYS, KENNETH J.	CHESTERFIELD	MO	US	

US-CL-CURRENT: 435/135; 435/196

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 23. Document ID: US 20020114820 A1

L2: Entry 23 of 39 File: PGPB Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020114820
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020114820 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 424/401

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 24. Document ID: US 20020106337 A1

L2: Entry 24 of 39 File: PGPB Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020106337
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020106337 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: August 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
Van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 424/59; 424/60

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 25. Document ID: US 20020071852 A1

L2: Entry 25 of 39 File: PGPB Jun 13, 2002

PGPUB-DOCUMENT-NUMBER: 20020071852
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020071852 A1

TITLE: Products for topical applications comprising oil bodies

PUBLICATION-DATE: June 13, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary		CA	
van Rooijen, Gijs	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	

US-CL-CURRENT: 424/401; 424/417, 426/601, 426/602, 426/605, 426/615, 426/629, 426/635, 426/805, 514/937, 516/53

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 26. Document ID: US 20020071846 A1

L2: Entry 26 of 39 File: PGPB Jun 13, 2002

PGPUB-DOCUMENT-NUMBER: 20020071846
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020071846 A1

TITLE: Vaccines comprising oil bodies

PUBLICATION-DATE: June 13, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Alberta		CA	
Rooijen, Gijs Van	Alberta		CA	
Boothe, Joseph	Alberta		CA	
Goll, Janis	Alberta		CA	
Moloney, Maurice M.	Alberta		CA	
Schryvers, Anthony B.	Alberta		CA	
Alcantara, Joenel	Alberta		CA	
Hutchins, Wendy A.	Alberta		CA	

US-CL-CURRENT: 424/184.1; 424/731, 424/750, 424/755, 424/757, 424/758, 424/764, 424/768

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 27. Document ID: US 20020037303 A1

L2: Entry 27 of 39 File: PGPB Mar 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020037303
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020037303 A1

TITLE: Thioredoxin and thioredoxin reductase containing oil body based products

PUBLICATION-DATE: March 28, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Deckers, Harm M.	Calgary	CA	CA	
Rooijen, Gijs van	Calgary		CA	
Boothe, Joseph	Calgary		CA	
Goll, Janis	Calgary		CA	
Moloney, Maurice M.	Calgary		CA	
Dalmia, Bipin K.	San Diego		US	

US-CL-CURRENT: 424/401

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 28. Document ID: US 6632980 B1

L2: Entry 28 of 39 File: USPT Oct 14, 2003

US-PAT-NO: 6632980
DOCUMENT-IDENTIFIER: US 6632980 B1

TITLE: Binary viral expression system in plants

DATE-ISSUED: October 14, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Yadav; Narendra S.	Chadds Ford	PA		
Falco; S. Carl	Wilmington	DE		

US-CL-CURRENT: 800/278; 435/320.1, 435/468, 800/280, 800/285, 800/287, 800/298, 800/301

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 29. Document ID: US 6599513 B2

L2: Entry 29 of 39 File: USPT Jul 29, 2003

US-PAT-NO: 6599513
DOCUMENT-IDENTIFIER: US 6599513 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: July 29, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
Van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/130.1, 424/400, 424/405, 424/450, 424/49, 424/59, 424/60, 424/62, 424/63, 424/642, 424/70.1 , 424/70.14, 424/70.21, 424/70.22, 424/70.27, 424/70.31, 424/94.61, 424/94.62, 424/94.63, 510/119, 510/135, 512/1, 512/2, 512/5, 514/159, 514/167, 514/168, 514/169, 514/2, 514/458, 514/474, 514/557, 514/725, 514/828, 514/845, 514/846, 514/847, 514/848, 514/882, 514/887

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

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☐ 30. Document ID: US 6596287 B2

L2: Entry 30 of 39 File: USPT Jul 22, 2003

US-PAT-NO: 6596287
DOCUMENT-IDENTIFIER: US 6596287 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: July 22, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/400, 424/405, 424/450, 424/59, 424/62, 424/63, 424/727, 424/756, 424/757, 424/758, 424/776, 514/865, 514/887, 516/53

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

☐ 31. Document ID: US 6582710 B2

L2: Entry 31 of 39 File: USPT Jun 24, 2003

US-PAT-NO: 6582710
DOCUMENT-IDENTIFIER: US 6582710 B2

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: June 24, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/400, 424/405, 424/450, 424/49, 424/59, 424/60, 424/62, 424/63, 424/642, 424/70.1, 424/70.14 , 424/70.21, 424/70.22, 424/70.27, 424/70.31, 424/776, 510/119, 510/135, 512/1, 512/2, 512/5, 514/159, 514/167, 514/168, 514/169, 514/2, 514/458, 514/474, 514/557, 514/725, 514/828, 514/845, 514/846, 514/847 , 514/848, 514/882, 514/887, 516/53

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

☐ 32. Document ID: US 6509453 B1

L2: Entry 32 of 39 File: USPT Jan 21, 2003

US-PAT-NO: 6509453
DOCUMENT-IDENTIFIER: US 6509453 B1

TITLE: Oil bodies and associated proteins as affinity matrices

DATE-ISSUED: January 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice	Calgary			CA
Boothe; Joseph	Calgary			CA
Van Rooijen; Gijs	Calgary			CA

US-CL-CURRENT: 530/412; 435/183, 435/6, 435/7.1, 530/350

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

☐ 33. Document ID: US 6476212 B1

L2: Entry 33 of 39 File: USPT Nov 5, 2002

US-PAT-NO: 6476212
DOCUMENT-IDENTIFIER: US 6476212 B1
**** See image for Certificate of Correction ****

TITLE: Polynucleotides and polypeptides derived from corn ear

DATE-ISSUED: November 5, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lalgudi; Raghunath V.	Clayton	MO		
Ito; Laura Y.	Pleasanton	CA		
Sherman; Bradley K.	Oakland	CA		

US-CL-CURRENT: 536/23.6; 435/6, 536/24.3

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image

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☐ 34. Document ID: US 6372234 B1

L2: Entry 34 of 39 File: USPT Apr 16, 2002

US-PAT-NO: 6372234
DOCUMENT-IDENTIFIER: US 6372234 B1
**** See image for Certificate of Correction ****

TITLE: Products for topical applications comprising oil bodies

DATE-ISSUED: April 16, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 424/400, 424/450, 514/937, 516/53

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw Desc | Image

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☐ 35. Document ID: US 6183762 B1

L2: Entry 35 of 39 File: USPT Feb 6, 2001

US-PAT-NO: 6183762
DOCUMENT-IDENTIFIER: US 6183762 B1

TITLE: Oil body based personal care products

DATE-ISSUED: February 6, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Deckers; Harm M.	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA
Goll; Janis	Calgary			CA
Moloney; Maurice M.	Calgary			CA

US-CL-CURRENT: 424/401; 426/417, 426/601, 426/602, 426/605, 426/615, 426/629, 426/635, 426/805, 514/937, 516/53

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

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☐ 36. Document ID: US 6143538 A

L2: Entry 36 of 39 File: USPT Nov 7, 2000

US-PAT-NO: 6143538
DOCUMENT-IDENTIFIER: US 6143538 A

TITLE: Fatty acyl-CoA reductase

DATE-ISSUED: November 7, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Somerville; Chris R.	Portola Valley	CA		
Reiser; Steven E.	University City	MO		

US-CL-CURRENT: 435/189; 435/252.3, 435/320.1, 530/350, 536/23.2, 536/23.7

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

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☐ 37. Document ID: US 6077992 A

L2: Entry 37 of 39 File: USPT Jun 20, 2000

US-PAT-NO: 6077992
DOCUMENT-IDENTIFIER: US 6077992 A

TITLE: Binary viral expression system in plants

DATE-ISSUED: June 20, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY

Yadav; Narendra S. Chadds Ford PA

US-CL-CURRENT: 800/278; 435/320.1, 435/468, 435/69.1, 800/285, 800/287, 800/288, 800/298, 800/300, 800/302

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

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☐ 38. Document ID: US 5856452 A

L2: Entry 38 of 39 File: USPT Jan 5, 1999

US-PAT-NO: 5856452
DOCUMENT-IDENTIFIER: US 5856452 A

TITLE: Oil bodies and associated proteins as affinity matrices

DATE-ISSUED: January 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moloney; Maurice	Calgary			CA
van Rooijen; Gijs	Calgary			CA
Boothe; Joseph	Calgary			CA

US-CL-CURRENT: 530/412; 435/262, 435/270, 435/272, 435/277

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

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☐ 39. Document ID: WO 9827115 A1

L2: Entry 39 of 39 File: EPAB Jun 25, 1998

PUB-NO: WO009827115A1
DOCUMENT-IDENTIFIER: WO 9827115 A1
TITLE: OIL BODIES AND ASSOCIATED PROTEINS AS AFFINITY MATRICES

PUBN-DATE: June 25, 1998

INVENTOR-INFORMATION:

NAME	COUNTRY
MOLONEY, MAURICE	CA
BOOTHE, JOSEPH	CA
VAN, ROOIJEN GIJS	CA

INT-CL (IPC): C07 K 14/415; C07 K 1/22; C12 N 9/74; C07 K 16/06; C08 B 1/00; C07 H 21/00; C01 G 11/00; B01 D 15/08
EUR-CL (EPC): B01D015/08; C01G011/00, C07H021/00 , C07H021/00 , C07K001/22 , C07K014/415 , C07K016/06 , C08B001/00 , C12N009/74

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWMC | Draw Desc | Image

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Term	Documents
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OILS	228775
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BOD	6421
BODA	692
BODAAND	1
BODAB	1
BODABILITY	3
BODACH	24
BODACH-CHARLES-M	1
BODACH-ET-AL	1
(OIL ADJ BOD$ SAME (LIGAND? OR MOLECULE? OR PROTEIN?) AND COVALENT$ AND (ISOLAT$ OR PURIF$ OR SEPARAT$)).PGPB,USPT,EPAB,DWPI,TDBD.	39

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L2 0 FILE ADISINSIGHT
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PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH
FIELD CODE - 'AND' OPERATOR ASSUMED 'BOD? (S) '
L31 0 FILE FEDRIP
L32 0 FILE FOMAD
L33 0 FILE FOREGE
L34 0 FILE FROSTI
L35 1 FILE FSTA
L36 0 FILE GENBANK
L37 0 FILE HEALSAFE
L38 5 FILE IFIPAT

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L39           0 FILE IMSPRODUCT
L40           0 FILE JICST-EPLUS
L41           0 FILE KOSMET
L42           0 FILE LIFESCI
L43           0 FILE MEDICONF
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L55           3 FILE PROMT
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L57           0 FILE RDISCLOSURE
L58           1 FILE SCISEARCH
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L62           5 FILE USPAT2
L63           0 FILE VETB
L64           0 FILE VETU
L65           1 FILE WPIDS
L66           0 FILE WPIFV

TOTAL FOR ALL FILES
L67          72 OIL (W) BOD? (S) (LIGAND# OR MOLECULE# OR PROTEIN#) AND COVALENT
                ? AND (ISOLAT? OR PURIF? OR SEPARAT? OR AFFINITY)

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PROCESSING COMPLETED FOR L67
L68           52 DUP REM L67 (20 DUPLICATES REMOVED)

=> d l68 1-52 ibib abs

L68  ANSWER 1 OF 52  USPATFULL on STN
ACCESSION NUMBER:         2004:126882  USPATFULL
TITLE:                    Oryza sativa nuclear cap binding protein 80
INVENTOR(S):              Kreps, Joel, Carlsbad, CA, UNITED STATES
                          Neru, Pamela S., Philadelphia, PA, UNITED STATES

                               NUMBER       KIND    DATE
                          ---------------- ------ --------
PATENT INFORMATION:       US 2004096861      A1   20040520
APPLICATION INFO.:        US 2003-469013     A1   20030826  (10)
                          WO 2002-EP3809          20020405
DOCUMENT TYPE:            Utility
FILE SEGMENT:             APPLICATION
LEGAL REPRESENTATIVE:     SYNGENTA BIOTECHNOLOGY, INC., PATENT DEPARTMENT, 3054
                          CORNWALLIS ROAD, P.O. BOX 12257, RESEARCH TRIANGLE
                          PARK, NC, 27709-2257
NUMBER OF CLAIMS:         59
EXEMPLARY CLAIM:          1
LINE COUNT:               5994
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB      An isolated polynucleotide encoding a monocot cap binding
        protein 80 (CBP80) is provided. Further provided are methods of using an
        inhibitor of monocot CBP80 to increase the drought tolerance of plants.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 2 OF 52 USPATFULL on STN

ACCESSION NUMBER:	2004:120607 USPATFULL
TITLE:	Binary viral expression system in plants
INVENTOR(S):	Yadav, Narendra S., Chadds Ford, PA, UNITED STATES Falco, Saverio Carl, Wilmington, DE, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004092017	A1	20040513
APPLICATION INFO.:	US 2003-603229	A1	20030625 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-442021, filed on 17 Nov 1999, GRANTED, Pat. No. US 6632980 Continuation-in-part of Ser. No. US 1998-178089, filed on 23 Oct 1998, GRANTED, Pat. No. US 6077992

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-150225P	19990823 (60)
	US 1999-130086P	19990420 (60)
	US 1997-63504P	19971024 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	E I DU PONT DE NEMOURS AND COMPANY, LEGAL PATENT RECORDS CENTER, BARLEY MILL PLAZA 25/1128, 4417 LANCASTER PIKE, WILMINGTON, DE, 19805
NUMBER OF CLAIMS:	51
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	10 Drawing Page(s)
LINE COUNT:	3371

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a plant transgene expression system. It is comprised of two chromosomally-integrated components that are individually heritable. One component is an inactive replicon, which contains cis-acting viral sequences required for replication and is unable to replicate episomally. The other component is a chimeric transactivating gene comprising a regulated promoter operably-linked to the coding region for a protein that can transactivate replicon replication. Regulated expression of the transactivation protein in plant cells also containing the inactive replicon will trigger the release of free replicon from the integrated inactive replicon and allow its episomal replication. The episomal system is useful for the regulated expression of foreign genes through gene amplification in plant tissue. Tissue-specific expression is controlled by the choice of promoter controlling the transcription of the transactivation gene.

This invention also relates to a second plant transgene expression system. This system has two chromosomally-integrated components that are individually heritable. One component is an inactive transgene, which contains site-specific sequences and is unable to be expressed. The other component is a chimeric transactivating site-specific recombinase under the control of a regulated promoter. Regulated expression of the site-specific recombinase protein in plant cells also containing the inactive transgene will activate the transgene through site-specific recombination. The expression system is useful for the regulated expression of foreign genes in plant tissue. Regulated expression is controlled by the choice of promoter controlling the transcription of the recombinase gene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 3 OF 52 USPATFULL on STN

ACCESSION NUMBER:	2004:107255 USPATFULL
TITLE:	Use of plant oil-bodies in vaccine delivery systems

INVENTOR(S): Schryvers, Anthony B, Alberta, CANADA
Hutchins, Wendy A, Alberta, CANADA
Moloney, Maurice M, Alberta, CANADA
Alcantra, Joenel, Calgary, CANADA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004081654	A1	20040429	
APPLICATION INFO.:	US 2003-297585	A1	20030915	(10)
	WO 2001-CA872		20010615	

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2
NUMBER OF CLAIMS: 54
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 2829
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the use of oil bodies as a vaccine adjuvant and delivery system for administration of vaccines by parenteral, mucosal (oral, nasal, pulmonary) and transdermal routes. In addition, the present invention relates to methods of eliciting an immune response in an animal by administering oil body-antigen complexes to said mammal. Finally, the present invention relates to methods of preparing oil body-antigen complexes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 4 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2004:88599 USPATFULL
TITLE: Polypeptides having xyloglucanase activity and nucleic acids encoding same
INVENTOR(S): Rey, Michael W., Davis, CA, UNITED STATES
Zaretsky, Elizabeth J., Davis, CA, UNITED STATES
Haas, Jeffrey A., Woodland, CA, UNITED STATES
PATENT ASSIGNEE(S): Novozymes Biotech, Inc., Davis, CA (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004067569	A1	20040408	
APPLICATION INFO.:	US 2003-420191	A1	20030418	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-373987P	20020419 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: NOVOZYMES BIOTECH, INC., 1445 DREW AVE, DAVIS, CA, 95616
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Page(s)
LINE COUNT: 3540
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to **isolated** polypeptides having Family 74 xyloglucanase activity and **isolated** nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 5 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2004:20717 USPATFULL

TITLE: Rice promoters for regulation of plant expression
INVENTOR(S): Budworth, Paul, San Diego, CA, UNITED STATES
Moughamer, Todd, San Diego, CA, UNITED STATES
Briggs, Steven P., Del Mar, CA, UNITED STATES
Cooper, Bret, La Jolla, CA, UNITED STATES
Glazebrook, Jane, San Diego, CA, UNITED STATES
Goff, Stephen Arthur, Encinitas, CA, UNITED STATES
Katagiri, Fumiaki, San Diego, CA, UNITED STATES
Kreps, Joel, Carlsbad, CA, UNITED STATES
Provart, Nicholas, Toronto, CANADA
Ricke, Darrell, San Diego, CA, UNITED STATES
Zhu, Tong, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004016025	A1	20040122	
APPLICATION INFO.:	US 2002-260238	A1	20020926	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-325448P	20010926	(60)
	US 2001-325277P	20010926	(60)
	US 2002-370620P	20020404	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: James E. Butler, Torrey Mesa Research Institute, 3115 Merryfield Row, San Diego, CA, 92121
NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
LINE COUNT: 18818
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a method to identify a plurality of plant promoters having a particular characteristic as well as the sequence of promoters having one of those characteristics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 6 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2004:14294 USPATFULL
TITLE: Plant acyl-CoA synthetases
INVENTOR(S): Shockey, Jay M., Mandeville, LA, UNITED STATES
Schnurr, Judy, Coon Rapids, MN, UNITED STATES
Browse, John A., Palouse, WA, UNITED STATES
PATENT ASSIGNEE(S): Washington State University Research Foundation, Pullman, WA (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004010817	A1	20040115	
APPLICATION INFO.:	US 2003-410031	A1	20030409	(10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-119136, filed on 9 Apr 2002, PENDING Continuation-in-part of Ser. No. US 2001-906419, filed on 16 Jul 2001, ABANDONED			

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2000-220474P	20000721	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Jaen Andrews, MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street, San Francisco, CA, 94105
NUMBER OF CLAIMS: 29
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 104 Drawing Page(s)
LINE COUNT: 4535
AB The present invention relates to genes encoding plant acyl-CoA

synthetases and methods of their use. In particular, the present invention is related to plant acyl-coenzyme A synthetases. The present invention encompasses both native and recombinant wild-type forms of the enzymes, as well as mutant and variant forms, some of which possess altered characteristics relative to the wild-type enzyme. The present invention also relates to methods of using acyl-CoA synthetases, including altered expression in transgenic plants and expression in prokaryotes and cell culture systems.

L68 ANSWER 7 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2004:14292 USPATFULL
TITLE: Identification and characterization of plant genes
INVENTOR(S): Lange, B. Markus, San Diego, CA, UNITED STATES
Ghassemian, Majid, Carlsbad, CA, UNITED STATES
Briggs, Steven P., Del Mar, CA, UNITED STATES
Cooper, Bret, La Jolla, CA, UNITED STATES
Glazebrook, Jane, San Diego, CA, UNITED STATES
Goff, Stephen Arthur, Encinitas, CA, UNITED STATES
Katagiri, Fumiaki, San Diego, CA, UNITED STATES
Kreps, Joel, Carlsbad, CA, UNITED STATES
Moughamer, Todd, San Diego, CA, UNITED STATES
Provart, Nicholas, Toronto, CANADA
Ricke, Darrell, San Diego, CA, UNITED STATES
Zhu, Tong, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004010815	A1	20040115	
APPLICATION INFO.:	US 2002-259194	A1	20020926	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-325277P	20010926	(60)
	US 2002-370743P	20020404	(60)
	US 2002-370620P	20020404	(60)
	US 2001-325277P	20010926	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TORREY MESA RESEARCH INSTITUTE, INTELLECTUAL PROPERTY DEPARTMENT, 3115 MERRYFIELD ROW, SAN DIEGO, CA, 92121
NUMBER OF CLAIMS: 113
EXEMPLARY CLAIM: 1
LINE COUNT: 10764
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are polynucleotide and polypeptide sequences involved in or associated with isoprenoid biosynthesis in plants. Also disclosed are uses for such sequences.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 8 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2004:12667 USPATFULL
TITLE: Enhancing the immune response to an antigen by presensitzing with an inducing agent prior to immunizing with the agent and the antigen
INVENTOR(S): Emtage, Peter, Boston, MA, UNITED STATES
Barber, Brian H., Mississauga, CA, UNITED STATES
Sambhara, Suryprakash, Decatur, GA, UNITED STATES
Sia, Charles Dwo Yuan, Toronto, CANADA

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004009185	A1	20040115	
APPLICATION INFO.:	US 2003-168417	A1	20030520	(10)
	WO 2001-CA5		20010105	

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Patrick J Halloran, Aventis Pasteur Inc, Knerr Building, One Discovery Drive, Swiftwater, PA, 18370
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 1545
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method of enhancing an immune response is disclosed. Th method involves an initial priming of the animal with an inducing agent, subsequently followed by administration of an inducing agent-antigen mixture. The antigen may be a tumour associated antigen, pathogenic organism antigen, autoimmune antigen, immunogenic fragment thereof, or a nucleic acid coding therefor.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 9 OF 52 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 1
ACCESSION NUMBER: 2003:105713 BIOSIS
DOCUMENT NUMBER: PREV200300105713
TITLE: **Oil bodies** and associated **proteins** as **affinity** matrices.
AUTHOR(S): Moloney, Maurice [Inventor, Reprint Author]; Boothe, Joseph [Inventor]; Van Rooijen, Gijs [Inventor]
CORPORATE SOURCE: Calgary, Canada
ASSIGNEE: SemBioSys Genetics Inc., Calgary, Canada
PATENT INFORMATION: US 6509453 January 21, 2003
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Jan 21 2003) Vol. 1266, No. 3. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 19 Feb 2003
Last Updated on STN: 19 Feb 2003
AB A method for the **separation** of a target molecule from a mixture is described. The method employs **oil bodies** and their associated **proteins** as **affinity** matrices for the selective, non-**covalent** binding of desired target **molecules**. The **oil body proteins** may be genetically fused to a **ligand** having specificity for the desired target **molecule**. Native **oil body proteins** can also be used in conjunction with an **oil body protein** specific **ligand** such as an antibody or an **oil body** binding **protein**. The method allows the **separation** and recovery of the desired target **molecules** due to the difference in densities between **oil bodies** and aqueous solutions

L68 ANSWER 10 OF 52 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 2
AN 10351905 IFIPAT;IFIUDB;IFICDB
TITLE: **OIL BODIES** AND ASSOCIATED **PROTEINS** AS **AFFINITY** MATRICES; **SEPARATION** OF PREFERENTIAL PARTICLES FROM SAMPLE; OBTAIN SAMPLE, INCUBATE WITH **OIL BODIES**, **SEPARATE** BOUND **OIL BODIES**
INVENTOR(S): Boothe; Joseph, Calgary, CA
Moloney; Maurice, Calgary, CA
Van Rooijen; Gijs, Calgary, CA
PATENT ASSIGNEE(S): SemBioSys Genetics Inc., Bay # 110, 2985-23rd Avenue N.E., Calgary, T1Y 7L3, CA
AGENT: BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2, CA

	NUMBER	PK	DATE
PATENT INFORMATION:	US 2003096320	A1	20030522
APPLICATION INFORMATION:	US 2002-260562		20021001

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
Section 371 PCT Filing OF:	WO 1997-CA951	19971205	UNKNOWN
CONTINUATION-IN-PART OF:	US 1996-767026	19961216	GRANTED
DIVISION OF:	US 1999-319275	19990827	6509453
FAMILY INFORMATION:	US 2003096320	20030522	
	US 6509453		
DOCUMENT TYPE:	Utility		
	Patent Application - First Publication		
FILE SEGMENT:	CHEMICAL		
	APPLICATION		
NUMBER OF CLAIMS:	36 16 Figure(s).		
	DESCRIPTION OF FIGURES:		

FIG. 1. The nucleotide and deduced amino acid sequence of the 18 KDa oleosin from Arabidopsis thaliana as shown in SEQ.ID.NO:1 and SEQ.ID.NO:2.

FIG. 2. Sequence of an Arabidopsis oleosin-hirudin fusion. Indicated are a portion of the oleosin genomic sequence (from base 1-1620 as reported in van Rooijen et al 1992, Plant Mol. Biol. 18: 1177-1179), a spacer sequence (base 1621-1635, underlined) and the synthetic DNA sequence encoding the mature hirudin variant-2 isoform (base 1636-1833, italicized) This gene fusion is regulated by the 5' upstream region of the Arabidopsis oleosin (bases 1-861) and the nopaline synthase termination sequence (base 1855-2109). The sequence is also shown in SEQ.ID.NO:3 and SEQ.ID.NO:4.

FIG. 3. Outline of the steps employed in the construction of pCGOBHIRT, containing the entire oleosin-hirudin construct.

FIG. 4. Schematic diagram illustrating the configuration of the oleosin-hirudin fusion **protein** on the **oil body** and the binding of thrombin.

FIG. 5. NaCl elution profiles of thrombin from wild type and 4A4 **oil** ***body*** matrices transformed with a construct expressing an oleosin-hirudin fusion.

FIG. 6. **Purification** of a horseradish peroxidase conjugated antiIgG antibody using an anti-oleosin antibody as a **ligand**. Schematic diagram illustrating the configuration of the oleosin/ anti-oleosin/anti-IgG sandwich complex bound to an **oil body**.

FIG. 7. Illustrates specific binding of anti-IgG antibodies to wild type ***oil*** **bodies** complexed with primary anti-oleosin antibodies as a **ligand** (left) and binding of anti-IgG antibodies to **oil** ***bodies*** which were not complexed with primary antibodies prior to binding with the secondary antibodies (right).

FIG. 8. Sequence of an oleosin metallothionein fusion. Indicated are the coding sequence of a B. napus oleosin cDNA (bases 10921652, van Rooijen, 1993, Ph.D. Thesis, University of Calgary), a spacer sequence (bases 1653-1670, underlined) and the human metallothionein gene mt-II (bases 1671-1876, Varshney and Gedamu, 1984, Gene, 31: 135-145)). The gene fusion is regulated by an Arabidopsis oleosin promoter (bases 1-1072) and ubiquitin termination sequence (bases 1870-2361, ubi3'; Kawalleck et al., 1993, Plant Mol. Biol. 21: 673-684). The sequence is also shown in SEQ.ID.NO:6 and SEQ.ID.NO:7.

FIG. 9. Outline of the steps employed in the construction of pBIOOM3' containing the entire oleosin-metallothionein construct.

FIG. 10. Schematic diagram illustrating the configuration of the oleosin-metallothionein fusion **protein** on the **oil** ***body*** and binding of cadmium ions.

FIG. 11. Illustrates the binding (A) and elution (B) of cadmium to an ***oil*** **body** matrix from wildtype B. carinata seeds and B. carinata seeds transformed with a construct expressing oleosin metallothionein gene fusion. Shown is the percentage cadmium bound to the **oil** ***body*** fraction of an **oil body** fraction harvested from transgenic and untransformed seeds. Bars represent average values of 5

replicate experiments (binding) and 3 replicates (elution).
FIG. 12. Illustrates the binding of **protein** A expressing S. aureus cells to **oil bodies** treated with varying amounts of antioleosin IgGs. Bars represent OD600 readings obtained following the procedures as described in Example 5 and using varying amounts of IgGs (0 mu l, 3, mu l, 30 mu l, 100 mu l of added IgG).
FIG. 13. Oligonucleotide primers used to amplify the sequence of the S. aureus ***protein*** A (The sequence is also shown in SEQ.ID. NO:8; The ***protein*** sequence is also shown in SEQ.ID.NO:9). Primer BK266, 5'C TCC ATG GAT CAA CGC AAT GGT TTA TC 3' (SEQ.ID. NO:10), a NcoI site (italicized) and a sequence identical to a portion of the **protein** A gene as contained within vector pRITZ2T (Pharmacia) (underlined) are indicated. Primer BK267, 5' GC AAG CTT CTA ATT TGT TAT CTG CAG GTC 3' (SEQ.ID.NO:11), a HindIII site (italicized), a stop codon (bold) and a sequence complementary to a portion of the **protein** A gene as contained within pRIT2T (Pharmacia) (underlined) are indicated. The PCR product was digested with NcoI and HindIII and ligated into pCGNOBPGUSA (Van Rooijen and Moloney, 1995, Plant Physiol. 109: 1353-1361) from which the NcoI-GUS-HindIII fragment had been removed.
FIG. 14. Sequence of an Arabidopsis oleosin-**protein** A fusion (The sequence is also shown in SEQ.ID.NO:12 and the **protein** sequence is also shown in SEQ.ID.NO:13 and 14). Indicated are a portion of the oleosin genomic sequence (from base 1-1626, as reported in van Rooijen et al., 1992 Plant Mol. Biol. 18: 11771179), a spacer sequence encoding a thrombin cleavage site (base 1627-1647, underlined) and the DNA sequence encoding **protein** A (base 1648-2437, italicized). Expression is regulated by the Arabidopsis 5' upstream region of the Arabidopsis oleosin (base 1-867) and the nopaline synthase terminator region (base 2437-2700).
FIG. 15. Schematic diagram illustrating the configuration of the oleosin-***protein*** A fusion **protein** on the **oil body** and binding of the immunoglobulin.
FIG. 16. A western blot illustrating the binding of HRPconjugated mouse anti-rabbit antibodies to **oil body protein** extracts obtained from transgenic B. napus lines expressing oleosin-***protein*** A fusion **proteins**. Shown on a Western blot probed with an HRP-conjugated antibody are **oil body** ***protein*** extracts from transgenic lines, opa 30 (lane 3), opa 31 (lane 4) , opa 34 (lane 5), opa 36 (lane 6), opa 47 (lane 7), opa 93 (lane 8), all expressing an oleosin-**protein** A fusion **protein** and a control untransformed B. napus line (lane 9), as well as lysates of E. coli DH5 alpha transformed with pRIT2T expressing **protein** A (lane 2) and untransformed E. coli DH5 alpha (lane 1).

AB A method for the **separation** of a target **molecule** from a mixture is described. The method employs **oil bodies** and their associated **proteins** as **affinity** matrices for the selective, noncovalent binding of desired target **molecules**. The **oil body proteins** may be genetically fused to a **ligand** having specificity for the desired target **molecule**. Native **oil body proteins** can also be used in conjunction with an **oil body protein** specific **ligand** such as an antibody or an **oil body** binding **protein**. The method allows the **separation** and recovery of the desired target **molecules** due to the difference in densities between **oil bodies** and aqueous solutions.

CLMN 36 16 Figure(s).
FIG. 1. The nucleotide and deduced amino acid sequence of the 18 KDa oleosin from Arabidopsis thaliana as shown in SEQ.ID.NO:1 and SEQ.ID.NO:2.
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SEQ.ID.NO:3 and SEQ.ID.NO:4.

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FIG. 11. Illustrates the binding (A) and elution (B) of cadmium to an **oil body** matrix from wildtype B. carinata seeds and B. carinata seeds transformed with a construct expressing oleosin metallothionein gene fusion. Shown is the percentage cadmium bound to the **oil body** fraction of an **oil body** fraction harvested from transgenic and untransformed seeds. Bars represent average values of 5 replicate experiments (binding) and 3 replicates (elution).

FIG. 12. Illustrates the binding of **protein** A expressing S. aureus cells to **oil bodies** treated with varying amounts of antioleosin IgGs. Bars represent OD600 readings obtained following the procedures as described in Example 5 and using varying amounts of IgGs (0 mu l, 3, mu l, 30 mu l, 100 mu l of added IgG).

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FIG. 14. Sequence of an Arabidopsis oleosin-**protein** A fusion (The sequence is also shown in SEQ.ID.NO:12 and the **protein** sequence is also shown in SEQ.ID.NO:13 and 14). Indicated are a portion of the oleosin genomic sequence (from base 1-1626, as reported in van Rooijen et al., 1992 Plant Mol. Biol. 18: 11771179), a spacer sequence encoding a thrombin cleavage site (base 1627-1647, underlined) and the

DNA sequence encoding **protein** A (base 1648-2437, italicized). Expression is regulated by the Arabidopsis 5' upstream region of the Arabidopsis oleosin (base 1-867) and the nopaline synthase terminator region (base 2437-2700).

FIG. 15. Schematic diagram illustrating the configuration of the oleosin-**protein** A fusion **protein** on the **oil body** and binding of the immunoglobulin.

FIG. 16. A western blot illustrating the binding of HRPconjugated mouse anti-rabbit antibodies to **oil body protein** extracts obtained from transgenic B. napus lines expressing oleosin-**protein** A fusion **proteins**. Shown on a Western blot probed with an HRP-conjugated antibody are **oil body protein** extracts from transgenic lines, opa 30 (lane 3), opa 31 (lane 4) , opa 34 (lane 5), opa 36 (lane 6), opa 47 (lane 7), opa 93 (lane 8), all expressing an oleosin-**protein** A fusion **protein** and a control untransformed B. napus line (lane 9), as well as lysates of E. coli DH5 alpha transformed with pRIT2T expressing **protein** A (lane 2) and untransformed E. coli DH5 alpha (lane 1).

L68 ANSWER 11 OF 52 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 3

AN 10349418 IFIPAT;IFIUDB;IFICDB

TITLE: METHODS FOR THE PRODUCTION OF MULTIMERIC IMMUNOGLOBULINS, AND RELATED COMPOSITIONS; PRODUCING IN A CELL COMPRISING **OIL BODIES**, A FIRST IMMUNOGLOBULIN-POLYPEPTIDE-CHAIN AND A SECOND IMMUNOGLOBULIN-POLYPEPTIDE-CHAIN; ASSOCIATING MULTIMERIC-IMMUNOGLOBULIN WITH AN **OIL BODY** THROUGH AN **OIL-BODY** -TARGETING-**PROTEIN**

INVENTOR(S): Moloney; Maurice, Calgary, CA
Szarka; Steven, Calgary, CA
Van Rooijen; Gijs, Calgary, CA

PATENT ASSIGNEE(S): Unassigned

AGENT: BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2, CA

	NUMBER	PK	DATE
PATENT INFORMATION:	US 2003093832	A1	20030515
APPLICATION INFORMATION:	US 2002-176380		20020621

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
CONTINUATION-IN-PART OF:	US 2001-6038	20011204	ABANDONED
CONTINUATION-IN-PART OF:	US 2001-32201	20011219	PENDING

	NUMBER	DATE
PRIORITY APPLN. INFO.:	US 2001-302885P	20010705 (Provisional)
FAMILY INFORMATION:	US 2003093832	20030515

DOCUMENT TYPE: Utility
Patent Application - First Publication

FILE SEGMENT: CHEMICAL
APPLICATION

NUMBER OF CLAIMS: 76 6 Figure(s).

DESCRIPTION OF FIGURES:

FIG. 1 provides a listing of exemplary **proteins** for use in the heteromultimeric-fusion-**proteins** and heteromultimeric-proteincomplexes provided herein.

FIG. 2 Coomassie stained **protein** gel showing the partitioning of assembled antibody complexes with the **oil body** (OB) or the soluble undematant (U) fraction from wild type (wt) Arabidopsis C24 or transgenic SBS4803 seeds. The arrow indicates the high molecular weight antibody complexes in non-reduced samples **separated** by SDS-PAGE as evident by the mouse IgG1 and **purified** D9 MAb control lanes.

FIG. 3. A) Coomassie stained gel of Arabidopsis total **protein** extracts showing reduced or non-reduced samples from wild type (wt) seeds and transgenic SBS4809 seeds expressing chimeric heavy and light antibody chains (Lines #6 and #13). Mouse (Mm) and human (Hu) samples of IgG1 antibody are included as controls. B) Western blots showing human heavy chain IgG Fcspecifc detection and human kappa chain-specific detection. Reduced samples were ***separated*** on SDS-PAGE to identify individual antibody chains, while non-reduced samples were **separated** to identify antibody assemblies of heavy and light chains **covalently** bound by disulfide bonds. Both heavy and light chains are detected in the assembled antibody complex (non-reduced samples; arrow). The migration of this complex is comparable to the mouse and human IgG1 control **protein**.

FIG. 4 (and SEQ ID NO:38) shows the amino acid sequence of the five immunoglobulin-binding domains in the **Protein** A sequence of Staphylococcus aureus.

FIG. 5 (and SEQ ID NO:39) shows the DNA and encoding amino acid sequence of the ***Protein*** A insert in pSBS2904.

FIG. 6. Individual wild type (wt) or transgenic safflower seeds were extracted and **oil body** (OB) and soluble undernatant (U) fractions were analyzed by Western blot. Detection was performed using a goat anti-human IgG Fc-specific secondary antibody (ICN Biomedicals Inc.). Seeds analyzed were from individual transgenic lines (**Protein** A-oleosin SBS4901, chimeric heavy and light chain SBS4810) or seeds resulting from the cross of the SBS4901 and SBS4810 transgenic lines. The double transgenic seed (SBS4810+SBS4901) and single transgenic seed (SBS4810 +-) resulting from the cross are compared to the single transgenic lines.

AB Improved methods for the production of multimeric-proteincomplexes, such as redox **proteins** and immunoglobulins, in association with **oil bodies** are described. The redox **protein** is enzymatically active when prepared in association with the **oil bodies**. Also provided are related nucleic acids, **proteins** , cells, plants, and compositions.

CLMN 76 6 Figure(s).

FIG. 1 provides a listing of exemplary **proteins** for use in the heteromultimeric-fusion-**proteins** and heteromultimeric-proteincomplexes provided herein.

FIG. 2 Coomassie stained **protein** gel showing the partitioning of assembled antibody complexes with the **oil body** (OB) or the soluble undematant (U) fraction from wild type (wt) Arabidopsis C24 or transgenic SBS4803 seeds. The arrow indicates the high molecular weight antibody complexes in non-reduced samples **separated** by SDS-PAGE as evident by the mouse IgG1 and **purified** D9 MAb control lanes.

FIG. 3. A) Coomassie stained gel of Arabidopsis total **protein** extracts showing reduced or non-reduced samples from wild type (wt) seeds and transgenic SBS4809 seeds expressing chimeric heavy and light antibody chains (Lines #6 and #13). Mouse (Mm) and human (Hu) samples of IgG1 antibody are included as controls. B) Western blots showing human heavy chain IgG Fcspecifc detection and human kappa chain-specific detection. Reduced samples were **separated** on SDS-PAGE to identify individual antibody chains, while non-reduced samples were **separated** to identify antibody assemblies of heavy and light chains **covalently** bound by disulfide bonds. Both heavy and light chains are detected in the assembled antibody complex (non-reduced samples; arrow). The migration of this complex is comparable to the mouse and human IgG1 control **protein**.

FIG. 4 (and SEQ ID NO:38) shows the amino acid sequence of the five immunoglobulin-binding domains in the **Protein** A sequence of Staphylococcus aureus.

FIG. 5 (and SEQ ID NO:39) shows the DNA and encoding amino acid sequence of the **Protein** A insert in pSBS2904.

FIG. 6. Individual wild type (wt) or transgenic safflower seeds were extracted and **oil body** (OB) and soluble undernatant (U) fractions were analyzed by Western blot. Detection was performed using a goat anti-human IgG Fc-specific secondary antibody (ICN Biomedicals Inc.). Seeds analyzed were from individual transgenic lines (

Protein A-oleosin SBS4901, chimeric heavy and light chain SBS4810) or seeds resulting from the cross of the SBS4901 and SBS4810 transgenic lines. The double transgenic seed (SBS4810+SBS4901) and single transgenic seed (SBS4810 +-) resulting from the cross are compared to the single transgenic lines.

L68 ANSWER 12 OF 52 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 4

AN	10315497 IFIPAT;IFIUDB;IFICDB
TITLE:	**OIL BODIES** AND ASSOCIATED **PROTEINS** AS **AFFINITY** MATRICES; **SEPARATION** OF TARGET **MOLECULE** FROM SAMPLE; OBTAIN SAMPLE, INCUBATE WITH OLI BODIES, **ISOLATE OIL BODY** BOUND TARGET
INVENTOR(S):	Boothe; Joseph, Calgary, CA Moloney; Maurice, Calgary, CA Van Rooijen; Gijs, Calgary, CA
PATENT ASSIGNEE(S):	SemBioSys Genetics Inc., Calgary, CA
AGENT:	BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2, CA

	NUMBER	PK	DATE
PATENT INFORMATION:	US 2003059910	A1	20030327
APPLICATION INFORMATION:	US 2002-260960		20021001

	APPLN. NUMBER	DATE	GRANTED PATENT NO. OR STATUS
Section 371 PCT Filing OF:	WO 1997-CA951	19971205	UNKNOWN
CONTINUATION OF:	US 1999-319275	19990827	PENDING
CONTINUATION-IN-PART OF:	US 1996-767026	19961216	GRANTED
FAMILY INFORMATION:	US 2003059910	20030327	

DOCUMENT TYPE:	Utility Patent Application - First Publication
FILE SEGMENT:	CHEMICAL APPLICATION
NUMBER OF CLAIMS:	36 17 Figure(s).

DESCRIPTION OF FIGURES:

FIG. 1. The nucleotide and deduced amino acid sequence of the 18 KDa oleosin from Arabidopsis thaliana as shown in SEQ.ID.NO:1 and SEQ.ID.NO:2.

FIG. 2. Sequence of an Arabidopsis oleosin-hirudin fusion. Indicated are a portion of the oleosin genomic sequence (from base 1-1620 as reported in van Rooijen et al 1992, Plant Mol. Biol. 18: 1177-1179), a spacer sequence (base 1621-1635, underlined) and the synthetic DNA sequence encoding the mature hirudin variant-2 isoform (base 1636-1833, italicized) This gene fusion is regulated by the 5' upstream region of the Arabidopsis oleosin (bases 1-861) and the nopaline synthase termination sequence (base 1855-2109). The sequence is also shown in SEQ.ID.NO:3 and SEQ.ID.NO:4.

FIG. 3. Outline of the steps employed in the construction of pCGOBHIRT, containing the entire oleosin-hirudin construct.

FIG. 4. Schematic diagram illustrating the configuration of the oleosin-hirudin fusion **protein** on the **oil body** and the binding of thrombin.

FIG. 5. NaCl elution profiles of thrombin from wild type and 4A4 **oil** ***body*** matrices transformed with a construct expressing an oleosin-hirudin fusion.

FIG. 6. **Purification** of a horseradish peroxidase conjugated antiIgG antibody using an anti-oleosin antibody as a **ligand**. Schematic diagram illustrating the configuration of the oleosin/ anti-oleosin/anti-IgG sandwich complex bound to an **oil body**.

FIG. 7. Illustrates specific binding of anti-IgG antibodies to wild type ***oil*** **bodies** complexed with primary anti-oleosin antibodies as a **ligand** (left) and binding of anti-IgG antibodies to **oil** ***bodies*** which were not complexed with primary antibodies prior to binding with the secondary antibodies (right).

FIG. 8. Sequence of an oleosin metallothionein fusion. Indicated are the coding sequence of a B. napus oleosin cDNA (bases 10921652, van Rooijen, 1993, Ph.D. Thesis, University of Calgary), a spacer sequence (bases 1653-1670, underlined) and the human metallothionein gene mt-II (bases 1671-1876, Varshney and Gedamu, 1984, Gene, 31: 135-145)). The gene fusion is regulated by an Arabidopsis oleosin promoter (bases 1-1072) and ubiquitin termination sequence (bases 1870-2361, ubi3'; Kawalleck et al., 1993, Plant Mol. Biol. 21: 673-684). The sequence is also shown in SEQ.ID.NO:6 and SEQ.ID.NO:7.

FIG. 9. Outline of the steps employed in the construction of pBIOOM3' containing the entire oleosin-metallothionein construct.

FIG. 10. Schematic diagram illustrating the configuration of the oleosin-metallothionein fusion **protein** on the **oil** ***body*** and binding of cadmium ions.

FIG. 11. Illustrates the binding (A) and elution (B) of cadmium to an ***oil*** **body** matrix from wildtype B. carinata seeds and B. carinata seeds transformed with a construct expressing oleosin metallothionein gene fusion. Shown is the percentage cadmium bound to the **oil** ***body*** fraction of an **oil body** fraction harvested from transgenic and untransformed seeds. Bars represent average values of 5 replicate experiments (binding) and 3 replicates (elution).

FIG. 12. Illustrates the binding of **protein** A expressing S. aureus cells to **oil bodies** treated with varying amounts of antioleosin IgGs. Bars represent OD600 readings obtained following the procedures as described in Example 5 and using varying amounts of IgGs (0 mu 1, 3, mu 1, 30 mu 1, 100 mu 1 of added IgG).

FIG. 13. Oligonucleotide primers used to amplify the sequence of the S. aureus ***protein*** A (The sequence is also shown in SEQ.ID. NO:8; The ***protein*** sequence is also shown in SEQ.ID.NO:9). Primer BK266, 5'C TCC ATG GAT CAA CGC AAT GGT TTA TC 3' (SEQ.ID. NO:10), a NcoI site (italicized) and a sequence identical to a portion of the **protein** A gene as contained within vector pRITZ2T (Pharmacia) (underlined) are indicated. Primer BK267, 5' GC AAG CTT CTA ATT TGT TAT CTG CAG GTC 3' (SEQ.ID.NO:11), a HindIII site (italicized), a stop codon (bold) and a sequence complementary to a portion of the **protein** A gene as contained within pRIT2T (Pharmacia) (underlined) are indicated. The PCR product was digested with NcoI and HindIII and ligated into pCGNOBPGUSA (Van Rooijen and Moloney, 1995, Plant Physiol. 109: 1353-1361) from which the NcoI-GUS-HindIII fragment had been removed.

FIG. 14. Sequence of an Arabidopsis oleosin-**protein** A fusion (The sequence is also shown in SEQ.ID.NO:12 and the **protein** sequence is also shown in SEQ.ID.NO:13 and 14). Indicated are a portion of the oleosin genomic sequence (from base 1-1626, as reported in van Rooijen et al., 1992 Plant Mol. Biol. 18: 11771179), a spacer sequence encoding a thrombin cleavage site (base 1627-1647, underlined) and the DNA sequence encoding **protein** A (base 1648-2437, italicized). Expression is regulated by the Arabidopsis 5' upstream region of the Arabidopsis oleosin (base 1-867) and the nopaline synthase terminator region (base 2437-2700).

FIG. 15. Schematic diagram illustrating the configuration of the oleosin-***protein*** A fusion **protein** on the **oil body** and binding of the immunoglobulin.

FIG. 16. A western blot illustrating the binding of HRPconjugated mouse anti-rabbit antibodies to **oil body protein** extracts obtained from transgenic B. napus lines expressing oleosin-***protein*** A fusion **proteins**. Shown on a Western blot probed with an HRP-conjugated antibody are **oil body** ***protein*** extracts from transgenic lines, opa 30 (lane 3), opa 31 (lane 4) , opa 34 (lane 5), opa 36 (lane 6), opa 47 (lane 7), opa 93 (lane 8), all expressing an oleosin-**protein** A fusion **protein** and a control untransformed B. napus line (lane 9), as well as lysates of E. coli DH5 alpha transformed with pRIT2T expressing **protein** A (lane 2) and untransformed E. coli DH5 alpha (lane 1).

FIG. 17 illustrates binding and elution of IgGs to **oil bodies** ***isolated*** from wildtype B. napus (bn wt) and a transgenic B. napus line, expressing an oleosin **protein** A fusions. Error bars represent the results from 4 independent experiments.

AB A method for the **separation** of a target **molecule** from a mixture is described. The method employs **oil bodies**

and their associated **proteins** as **affinity** matrices for the selective, noncovalent binding of desired target **molecules**. The **oil body proteins** may be genetically fused to a **ligand** having specificity for the desired target **molecule**. Native **oil body proteins** can also be used in conjunction with an **oil body protein** specific **ligand** such as an antibody or an **oil body** binding **protein**. The method allows the **separation** and recovery of the desired target **molecules** due to the difference in densities between **oil bodies** and aqueous solutions.

CLMN 36 17 Figure(s).

FIG. 1. The nucleotide and deduced amino acid sequence of the 18 KDa oleosin from Arabidopsis thaliana as shown in SEQ.ID.NO:1 and SEQ.ID.NO:2.

FIG. 2. Sequence of an Arabidopsis oleosin-hirudin fusion. Indicated are a portion of the oleosin genomic sequence (from base 1-1620 as reported in van Rooijen et al 1992, Plant Mol. Biol. 18: 1177-1179), a spacer sequence (base 1621-1635, underlined) and the synthetic DNA sequence encoding the mature hirudin variant-2 isoform (base 1636-1833, italicized) This gene fusion is regulated by the 5' upstream region of the Arabidopsis oleosin (bases 1-861) and the nopaline synthase termination sequence (base 1855-2109). The sequence is also shown in SEQ.ID.NO:3 and SEQ.ID.NO:4.

FIG. 3. Outline of the steps employed in the construction of pCGOBHIRT, containing the entire oleosin-hirudin construct.

FIG. 4. Schematic diagram illustrating the configuration of the oleosin-hirudin fusion **protein** on the **oil body** and the binding of thrombin.

FIG. 5. NaCl elution profiles of thrombin from wild type and 4A4 **oil body** matrices transformed with a construct expressing an oleosin-hirudin fusion.

FIG. 6. **Purification** of a horseradish peroxidase conjugated antiIgG antibody using an anti-oleosin antibody as a **ligand**. Schematic diagram illustrating the configuration of the oleosin/ anti-oleosin/anti-IgG sandwich complex bound to an **oil body**.

FIG. 7. Illustrates specific binding of anti-IgG antibodies to wild type **oil bodies** complexed with primary anti-oleosin antibodies as a **ligand** (left) and binding of anti-IgG antibodies to **oil bodies** which were not complexed with primary antibodies prior to binding with the secondary antibodies (right).

FIG. 8. Sequence of an oleosin metallothionein fusion. Indicated are the coding sequence of a B. napus oleosin cDNA (bases 10921652, van Rooijen, 1993, Ph.D. Thesis, University of Calgary), a spacer sequence (bases 1653-1670, underlined) and the human metallothionein gene mt-II (bases 1671-1876, Varshney and Gedamu, 1984, Gene, 31: 135-145)). The gene fusion is regulated by an Arabidopsis oleosin promoter (bases 1-1072) and ubiquitin termination sequence (bases 1870-2361, ubi3'; Kawalleck et al., 1993, Plant Mol. Biol. 21: 673-684). The sequence is also shown in SEQ.ID.NO:6 and SEQ.ID.NO:7.

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FIG. 10. Schematic diagram illustrating the configuration of the oleosin-metallothionein fusion **protein** on the **oil body** and binding of cadmium ions.

FIG. 11. Illustrates the binding (A) and elution (B) of cadmium to an **oil body** matrix from wildtype B. carinata seeds and B. carinata seeds transformed with a construct expressing oleosin metallothionein gene fusion. Shown is the percentage cadmium bound to the **oil body** fraction of an **oil body** fraction harvested from transgenic and untransformed seeds. Bars represent average values of 5 replicate experiments (binding) and 3 replicates (elution).

FIG. 12. Illustrates the binding of **protein** A expressing S.

aureus cells to **oil bodies** treated with varying amounts of antioleosin IgGs. Bars represent OD600 readings obtained following the procedures as described in Example 5 and using varying amounts of IgGs (0 mu l, 3, mu l, 30 mu l, 100 mu l of added IgG).

FIG. 13. Oligonucleotide primers used to amplify the sequence of the S. aureus **protein** A (The sequence is also shown in SEQ.ID. NO:8; The **protein** sequence is also shown in SEQ.ID.NO:9). Primer BK266, 5'C TCC ATG GAT CAA CGC AAT GGT TTA TC 3' (SEQ.ID. NO:10), a NcoI site (italicized) and a sequence identical to a portion of the **protein** A gene as contained within vector pRITZ2T (Pharmacia) (underlined) are indicated. Primer BK267, 5' GC AAG CTT CTA ATT TGT TAT CTG CAG GTC 3' (SEQ.ID.NO:11), a HindIII site (italicized), a stop codon (bold) and a sequence complementary to a portion of the **protein** A gene as contained within pRIT2T (Pharmacia) (underlined) are indicated. The PCR product was digested with NcoI and HindIII and ligated into pCGNOBPGUSA (Van Rooijen and Moloney, 1995, Plant Physiol. 109: 1353-1361) from which the NcoI-GUS-HindIII fragment had been removed.

FIG. 14. Sequence of an Arabidopsis oleosin-**protein** A fusion (The sequence is also shown in SEQ.ID.NO:12 and the **protein** sequence is also shown in SEQ.ID.NO:13 and 14). Indicated are a portion of the oleosin genomic sequence (from base 1-1626, as reported in van Rooijen et al., 1992 Plant Mol. Biol. 18: 11771179), a spacer sequence encoding a thrombin cleavage site (base 1627-1647, underlined) and the DNA sequence encoding **protein** A (base 1648-2437, italicized). Expression is regulated by the Arabidopsis 5' upstream region of the Arabidopsis oleosin (base 1-867) and the nopaline synthase terminator region (base 2437-2700).

FIG. 15. Schematic diagram illustrating the configuration of the oleosin-**protein** A fusion **protein** on the **oil body** and binding of the immunoglobulin.

FIG. 16. A western blot illustrating the binding of HRPconjugated mouse anti-rabbit antibodies to **oil body protein** extracts obtained from transgenic B. napus lines expressing oleosin-**protein** A fusion **proteins**. Shown on a Western blot probed with an HRP-conjugated antibody are **oil body protein** extracts from transgenic lines, opa 30 (lane 3), opa 31 (lane 4) , opa 34 (lane 5), opa 36 (lane 6), opa 47 (lane 7), opa 93 (lane 8), all expressing an oleosin-**protein** A fusion **protein** and a control untransformed B. napus line (lane 9), as well as lysates of E. coli DH5 alpha transformed with pRIT2T expressing **protein** A (lane 2) and untransformed E. coli DH5 alpha (lane 1).

FIG. 17 illustrates binding and elution of IgGs to **oil bodies isolated** from wildtype B. napus (bn wt) and a transgenic B. napus line, expressing an oleosin **protein** A fusions. Error bars represent the results from 4 independent experiments.

L68 ANSWER 13 OF 52 USPATFULL on STN

ACCESSION NUMBER: 2003:300288 USPATFULL

TITLE: Nucleic acids and proteins with thioredoxin reductase activity

INVENTOR(S): Briggs, Steven P., Del Mar, CA, UNITED STATES
Dalmia, Bipin K., San Diego, CA, UNITED STATES
del Val, Greg, Encinitas, CA, UNITED STATES
Desjarlais, John R., Pasadena, CA, UNITED STATES
Heifetz, Peter, San Diego, CA, UNITED STATES
Luginbuhl, Peter, San Diego, CA, UNITED STATES
Muchhal, Umesh, Monrovia, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003211511	A1	20031113
APPLICATION INFO.:	US 2002-290072	A1	20021106 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-141531, filed on 6 May 2002, PENDING

NUMBER DATE

PRIORITY INFORMATION:	US 2001-289029P	20010504 (60)
	US 2002-370609P	20020405 (60)
	US 2002-376682P	20020429 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: DORSEY & WHITNEY LLP, INTELLECTUAL PROPERTY DEPARTMENT, 4 EMBARCADERO CENTER, SUITE 3400, SAN FRANCISCO, CA, 94111
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 91 Drawing Page(s)
LINE COUNT: 5145
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the use of a variety of methods for generating functional thioredoxin reductase variants in which at least one physical, chemical or biological property of the variant is altered in a specific and desired manner when compared to the wild-type protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 14 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:243884 USPATFULL
TITLE: Thermotolerant phytase for animal feed
INVENTOR(S): Lanahan, Michael B., Morrisville, NC, UNITED STATES
Betts, Scott, Durham, NC, UNITED STATES
PATENT ASSIGNEE(S): Syngenta Participations AG, Basel, SWITZERLAND (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003170293	A1	20030911	
APPLICATION INFO.:	US 2002-334671	A1	20021230	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-344476P	20011228 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROPES & GRAY LLP, ONE INTERNATIONAL PLACE, BOSTON, MA, 02110-2624
NUMBER OF CLAIMS: 56
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 4346
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a synthetic phytase polynucleotide which is optimized for expression in plants and which encodes at thermotolerant phytase, as well as **isolated** thermotolerant phytase enzyme. Also provided are feed or food products comprising a thermotolerant phytase, and transgenic plants which express the thermotolerant phytase. Further provided are methods for making and using thermotolerant phytases, e.g., a method of using a thermotolerant phytase in feed and food processing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 15 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:239371 USPATFULL
TITLE: Expression and **purification** of bioactive, authentic polypeptides from plants
INVENTOR(S): Russell, Douglas A., Madison, WI, UNITED STATES
Schlittler, Michael, Wildwood, MO, UNITED STATES

	NUMBER	KIND	DATE

PATENT INFORMATION: US 2003167531 A1 20030904
APPLICATION INFO.: US 2001-824200 A1 20010403 (9)
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-113244, filed on 10 Jul 1998, GRANTED, Pat. No. US 6512162 Continuation-in-part of Ser. No. US 1999-316847, filed on 21 May 1999, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-194217P	20000403 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ARNOLD & PORTER, Attn: IP Docketing Department Room 1126B, 555 - 12th Street NW, Washington, DC, 20004-1206
NUMBER OF CLAIMS: 92
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 25 Drawing Page(s)
LINE COUNT: 2681
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a process for the production of proteins or polypeptides using genetically manipulated plants or plant cells, as well as to the genetically manipulated plants and plant cells per se (including parts of the genetically manipulated plants), the heterologous protein material (e.g., a protein, polypeptide and the like) which is produced with the aid of these genetically manipulated plants or plant cells, and the recombinant polynucleotides (DNA or RNA) that are used for the genetic manipulation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 16 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:239364 USPATFULL
TITLE: Methods for the production of multimeric protein complexes, and related compositions
INVENTOR(S): Rooijen, Gijs Van, Alberta, CANADA
Zaplachinski, Steven, Alberta, CANADA
Heifetz, Peter-Bernard, San Diego, CA, UNITED STATES
Briggs, Steven, Del Mar, CA, UNITED STATES
Dalmia, Bipin Kumar, San Diego, CA, UNITED STATES
Val, Greg Del, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003167524	A1	20030904
APPLICATION INFO.:	US 2001-32201	A1	20011219 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-6038, filed on 4 Dec 2001, ABANDONED Continuation-in-part of Ser. No. US 2000-331363, filed on 19 Dec 2000, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-302885P	20010705 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HELLER EHRMAN WHITE & MCAULIFFE LLP, 4350 LA JOLLA VILLAGE DRIVE, 7TH FLOOR, SAN DIEGO, CA, 92122-1246
NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 4597
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Improved methods for the production of multimeric-**protein**-complexes, such as redox **proteins** and immunoglobulins, in association with **oil bodies** are described. The redox **protein** is enzymatically active when prepared in association with the **oil bodies**. Also provided are related

nucleic acids, **proteins**, cells, plants, and compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 17 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:196076 USPATFULL
TITLE: Genes that are modulated by posttranscriptional gene silencing
INVENTOR(S): Zhu, Tong, San Diego, CA, UNITED STATES
Wang, Xun, San Diego, CA, UNITED STATES
Chang, Hur-Song, San Diego, CA, UNITED STATES
Briggs, Steven P., Del Mar, CA, UNITED STATES
Cooper, Bret, La Jolla, CA, UNITED STATES
Glazebrook, Jane, San Diego, CA, UNITED STATES
Goff, Stephen A., Encinitas, CA, UNITED STATES
Katagiri, Fumiaki, San Diego, CA, UNITED STATES
Kreps, Joel, Carlsbad, CA, UNITED STATES
Moughamer, Todd, San Diego, CA, UNITED STATES
Provart, Nicholas, Toronto, CANADA
Ricke, Darrell, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003135888	A1	20030717	
APPLICATION INFO.:	US 2002-259165	A1	20020926	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2002-368327P	20020327	(60)
	US 2001-325277P	20010926	(60)
	US 2002-370620P	20020404	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: TORREY MESA RESEARCH INSTITUTE, INTELLECTUAL PROPERTY DEPARTMENT, 3115 MERRYFIELD ROW, SAN DIEGO, CA, 92121
NUMBER OF CLAIMS: 67
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 7516
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a method to identify genes that are modulated by posttranscriptional gene silencing as well as regulatory elements and methods to modulate gene expression by posttranscriptional gene silencing.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 18 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:196073 USPATFULL
TITLE: Self-processing plants and plant parts
INVENTOR(S): Lanahan, Michael B., Research Triangle Park, NC, UNITED STATES
Basu, Shib Sankar, Apex, NC, UNITED STATES
Batie, Christopher J., Durham, NC, UNITED STATES
Chen, Wen, Cary, NC, UNITED STATES
Craig, Joyce, Pittsboro, NC, UNITED STATES
Kinkema, Mark, Durham, NC, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003135885	A1	20030717	
APPLICATION INFO.:	US 2002-228063	A1	20020827	(10)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2001-315281P	20010827	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HALE & DORR LLP, THE WILLARD OFFICE BUILDING, 1455 PENNSYLVANIA AVE, NW, WASHINGTON, DC, 20004
NUMBER OF CLAIMS: 234
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 24 Drawing Page(s)
LINE COUNT: 8257
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides polynucleotides, preferably synthetic polynucleotides, which encode processing enzymes that are optimized for expression in plants. The polynucleotides encode mesophilic, thermophilic, or hyperthermophilic processing enzymes, which are activated under suitable activating conditions to act upon the desired substrate. Also provided are "self-processing" transgenic plants, and plant parts, e.g., grain, which express one or more of these enzymes and have an altered composition that facilitates plant and grain processing. Methods for making and using these plants, e.g., to produce food products having improved taste and to produce fermentable substrates for the production of ethanol and fermented beverages are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 19 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:146996 USPATFULL
TITLE: Nucleic acids and proteins with thioredoxin reductase activity
INVENTOR(S): Dalmia, Bipin K., San Diego, CA, UNITED STATES
Briggs, Steven P., Del Mar, CA, UNITED STATES
Val, Greg del, Encinitas, CA, UNITED STATES
Desjarlais, John R., Pasadena, CA, UNITED STATES
Heifetz, Peter, San Diego, CA, UNITED STATES
Luginbuhl, Peter, San Diego, CA, UNITED STATES
Muchhal, Umesh, West Covina, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003100743	A1	20030529	
APPLICATION INFO.:	US 2002-141531	A1	20020506	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-376682P	20020429 (60)
	US 2002-370609P	20020405 (60)
	US 2001-289029P	20010504 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Robin M. Silva, DORSEY & WHITNEY LLP, Suite 3400, Four Embarcadero Center, San Francisco, CA, 94111-4187
NUMBER OF CLAIMS: 77
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 79 Drawing Page(s)
LINE COUNT: 4771
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to the use of a variety of methods for generating functional thioredoxin reductase variants in which at least one physical, chemical or biological property of the variant is altered in a specific and desired manner when compared to the wild-type protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 20 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:141834 USPATFULL
TITLE: Plant acyl-CoA synthetases
INVENTOR(S): Shockey, Jay M., Pullman, WA, UNITED STATES
Schnurr, Judy, Pullman, WA, UNITED STATES

Browse, John A., Pullman, WA, UNITED STATES
PATENT ASSIGNEE(S): Washington State University Research Foundation, Pullman, WA, 99163 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003097676	A1	20030522
APPLICATION INFO.:	US 2002-119136	A1	20020409 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-906419, filed on 16 Jul 2001, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-220474P	20000721 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Jaen Andrews, MEDLEN & CARROLL, LLP, Suite 350, 101 Howard Street,, San Francisco, CA, 94105
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 74 Drawing Page(s)
LINE COUNT: 3978

AB The present invention relates to genes encoding plant acyl-CoA synthetases and methods of their use. In particular, the present invention is related to plant acyl-coenzyme A synthetases. The present invention encompasses both native and recombinant wild-type forms of the enzymes, as well as mutant and variant forms, some of which possess altered characteristics relative to the wild-type enzyme. The present invention also relates to methods of using acyl-CoA synthetases, including altered expression in transgenic plants and expression in prokaryotes and cell culture systems.

L68 ANSWER 21 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:107775 USPATFULL
TITLE: Methods for improving seed characteristics
INVENTOR(S): Tarczynski, Mitchell C., West Des Moines, IA, UNITED STATES
Olsen, Odd-Arne, Johnston, IA, UNITED STATES
Shen, Bo, Johnston, IA, UNITED STATES
Lid, Stein E., As, NORWAY
Li, Changjiang, Urbandale, IA, UNITED STATES
Jung, Rudolf, Des Moines, IA, UNITED STATES
Gruis, Darren B., Des Moines, IA, UNITED STATES
Lorentzen, Jennifer A., Des Moines, IA, UNITED STATES
Ananiev, Evgueni, Johnston, IA, UNITED STATES
Nichols, Scott E., Westchester, PA, UNITED STATES
Wang, Cunxi, Johnston, IA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003074689	A1	20030417
APPLICATION INFO.:	US 2002-208948	A1	20020730 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-309719P	20010802 (60)
	US 2001-337444P	20011025 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PIONEER HI-BRED INTERNATIONAL INC., 7100 N.W. 62ND AVENUE, P.O. BOX 1000, JOHNSTON, IA, 50131
NUMBER OF CLAIMS: 52
EXEMPLARY CLAIM: 1
LINE COUNT: 7605

AB Methods are provided for altering grain characteristics by introducing

into plants, **isolated** nucleic acid molecules that can be used to produce transgenic plants characterized by altered number, type, or configuration of aleurone cells within the seed. Also provided are **isolated** nucleic acids that encode maize dek1 and superal proteins, vectors capable of expressing such nucleic acid molecules, host cells containing such vectors, and polypeptides encoded by such nucleic acids. Also provided is an **isolated** promoter natively associated with the maize dek1 coding region; and expression cassettes, vectors, and host cells comprising the promoter seuquence.

L68 ANSWER 22 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:86197 USPATFULL
TITLE: Nucleic acid and protein sequences of bovine epidermal growth factor
INVENTOR(S): Bilodeau-Goeseels, Sylvie, Lethbridge, CANADA
John, Sushil Jacob, Lethbridge, CANADA
Selinger, Leonard Brent, Lethbridge, CANADA
Benkel, Bernhard F., Lethbridge, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003059802	A1	20030327
APPLICATION INFO.:	US 2002-150648	A1	20020517 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-292136P	20010518 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GREENLEE WINNER AND SULLIVAN P C, 5370 MANHATTAN CIRCLE, SUITE 201, BOULDER, CO, 80303
NUMBER OF CLAIMS: 57
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Page(s)
LINE COUNT: 2769
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides a nucleotide sequence of bovine epidermal growth factor (bEGF) and the deduced amino acid sequence of the encoded protein. The invention further provides the nucleotide sequence of mature bEGF and the deduced mature bEGF protein. The invention extends to homologous nucleic acids, proteins, and fragments functionally equivalent to the nucleotide sequence of the bEGF gene and bEGF protein, respectively. Bovine EGF may be expressed in microorganisms such as E. coli or P. pastoris, and plant hosts, such as potato. Activity of recombinant bEGF may be confirmed using a cell proliferation/DNA synthesis assay. Bovine EGF demonstrates utility in livestock and dairy productions as a supplement in farm animal feed to promote growth; to prevent or treat intestinal infections; to stimulate precocious maturation of gut cells to secrete an appropriate spectrum of digestive enzymes; and to increase nutrient absorption.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 23 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:52396 USPATFULL
TITLE: Plant acyl-CoA synthetases
INVENTOR(S): Shockey, Jay M., Pullman, WA, UNITED STATES
Schnurr, Judy, Pullman, WA, UNITED STATES
Browse, John A., Pullman, WA, UNITED STATES
PATENT ASSIGNEE(S): Washington State University Research Foundation, Pullman, WA, UNITED STATES, 99163 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003037357	A1	20030220

APPLICATION INFO.: US 2001-906419 A1 20010716 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-220474P	20000721 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA, 94105
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 71 Drawing Page(s)
LINE COUNT: 3314

AB The present invention relates to genes encoding plant acyl-CoA synthetases and methods of their use. In particular, the present invention is related to plant acyl-coenzyme A synthetases. The present invention encompasses both native and recombinant wild-type forms of the enzymes, as well as mutant and variant forms, some of which possess altered characteristics relative to the wild-type enzyme. The present invention also relates to methods of using acyl-CoA synthetases, including altered expression in transgenic plants and expression in prokaryotes and cell culture systems.

L68 ANSWER 24 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2003:273504 USPATFULL
TITLE: Binary viral expression system in plants
INVENTOR(S): Yadav, Narendra S., Chadds Ford, PA, United States
Falco, S. Carl, Wilmington, DE, United States
PATENT ASSIGNEE(S): E. I. du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6632980	B1	20031014
APPLICATION INFO.:	US 1999-442021		19991117 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-178089, filed on 23 Oct 1998, now patented, Pat. No. US 6077992

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-150255P	19990823 (60)
	US 1999-130086P	19990420 (60)
	US 1997-63504P	19971024 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Mehta, Ashwin
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT: 3254
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to two plant transgene expression systems. The first is comprised of two chromosomally-integrated components that are individually heritable. One component is an inactive replicon, which contains cis-acting viral sequences required for replication and is unable to replicate episomally. The other component is a chimeric transactivating gene comprising a regulated promoter operably-linked to the coding region for a protein that can transactivate replicon replication. Regulated expression of the transactivation protein in plant cells containing the inactive replicon triggers release of free replicon from the integrated inactive replicon and allows episomal replication.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 25 OF 52 USPATFULL on STN DUPLICATE 5
ACCESSION NUMBER: 2002:213447 USPATFULL
TITLE: Products for topical applications comprising oil bodies
INVENTOR(S): Deckers, Harm M., Calgary, CANADA
Van Rooijen, Gijs, Calgary, CANADA
Boothe, Joseph, Calgary, CANADA
Goll, Janis, Calgary, CANADA
Moloney, Maurice M., Calgary, CANADA
PATENT ASSIGNEE(S): SemBioSys Genetics Inc., Calgary, CANADA (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002114820	A1	20020822
	US 6582710	B2	20030624
APPLICATION INFO.:	US 2002-58125	A1	20020129 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-577147, filed on 24 May 2000, PATENTED Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, PATENTED Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-47753P	19970527 (60)
	US 1997-47779P	19970528 (60)
	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BERESKIN AND PARR, SCOTIA PLAZA, 40 KING STREET WEST-SUITE 4000 BOX 401, TORONTO, ON, M5H 3Y2
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 2238
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in products for topical application to the skin. The products are very mild to the skin and may be easily formulated into a wide variety of personal care and dermatological products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 26 OF 52 USPATFULL on STN DUPLICATE 6
ACCESSION NUMBER: 2002:198244 USPATFULL
TITLE: Products for topical applications comprising oil bodies
INVENTOR(S): Deckers, Harm M., Calgary, CANADA
Van Rooijen, Gijs, Calgary, CANADA
Boothe, Joseph, Calgary, CANADA
Goll, Janis, Calgary, CANADA
Moloney, Maurice M., Calgary, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002106337	A1	20020808
	US 6599513	B2	20030729
APPLICATION INFO.:	US 2001-983546	A1	20011024 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-577147, filed on 24 May 2000, PATENTED Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, PATENTED Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
	US 1997-47779P	19970528 (60)
	US 1997-47753P	19970527 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MICHELINE GRAVELLE, Bereskin & Parr, 40 King Street West, Box 401, Toronto, ON, M5H 3Y2
NUMBER OF CLAIMS: 49
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 2449
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in products for topical application to the skin. The products are very mild to the skin and may be easily formulated into a wide variety of personal care and dermatological products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 27 OF 52 USPATFULL on STN DUPLICATE 7
ACCESSION NUMBER: 2002:140871 USPATFULL
TITLE: Products for topical applications comprising oil bodies
INVENTOR(S): Deckers, Harm M., Calgary, CANADA
van Rooijen, Gijs, Calgary, CANADA
Boothe, Joseph, Calgary, CANADA
Goll, Janis, Calgary, CANADA
Moloney, Maurice M., Calgary, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002071852	A1	20020613
	US 6596287	B2	20030722
APPLICATION INFO.:	US 2001-983540	A1	20011024 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-577147, filed on 24 May 2000, PENDING Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, PATENTED Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
	US 1997-47779P	19970528 (60)
	US 1997-47753P	19970527 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MICHELINE GRAVELLE, Bereskin & Parr, 40 King Street West, Box 401, Toronto, M5H 3Y2
NUMBER OF CLAIMS: 34
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Page(s)
LINE COUNT: 2272
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in products for topical application to the skin. The products are very mild to the skin and may be easily formulated into a wide variety of personal care and dermatological products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 28 OF 52 USPATFULL on STN DUPLICATE 8
ACCESSION NUMBER: 2002:32502 USPATFULL
TITLE: Method of treating fabrics
INVENTOR(S): Howell, Steven, Sharnbrook, UNITED KINGDOM
Little, Julie, Sharnbrook, UNITED KINGDOM
Van Der Logt, Cornelis Paul, Vlaardingen, NETHERLANDS
Parry, Neil James, Sharnbrook, UNITED KINGDOM

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002019324	A1	20020214	
	US 6579842	B2	20030617	
APPLICATION INFO.:	US 2000-742693	A1	20001220	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1999-310431	19991222

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: UNILEVER, PATENT DEPARTMENT, 45 RIVER ROAD, EDGEWATER, NJ, 07020
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 2105
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There is provided a method of delivering a benefit agent to fabric for exerting a pre-determined activity, wherein the fabric is pre-treated with a multi-specific binding molecule which has a high binding **affinity** to said fabric through one specificity and is capable of binding to said benefit agent through another specificity, followed by contacting said pre-treated fabric with said benefit agent, to enhance said pre-determined activity to said fabric. Preferably, the binding molecule is an antibody or fragment thereof, or a fusion protein comprising a cellulose binding domain and a domain having a high binding **affinity** to another ligand which is directed to said benefit agent. The method is useful for example for stain removal, perfume delivery, and treating collars and cuffs for wear.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 29 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2002:322526 USPATFULL
TITLE: POLYHYDROXYALKANOATE BIOSYNTHESIS ASSOCIATED PROTEINS AND CODING REGION IN BACILLUS MEGATERIUM
INVENTOR(S): CANNON, MAURA C., AMHERST, MA, UNITED STATES
CANNON, FRANCIS C., AMHERST, MA, UNITED STATES
MCCOOL, GABRIEL J., NORTHAMPTON, MA, UNITED STATES
VALENTINE, HENRY E., CHESTERFIELD, MO, UNITED STATES
GRUYS, KENNETH J., CHESTERFIELD, MO, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002182690	A1	20021205	
APPLICATION INFO.:	US 2000-479040	A1	20000107	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-115092P	19990107 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: PATREA L. PABST, HOLLAND & KNIGHT, LLP, 1201 WEST PEACHTREE STREET, SUITE 2000, ATLANTA, GA, 30309-3400
NUMBER OF CLAIMS: 23

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 17 Drawing Page(s)
LINE COUNT: 3841
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A 7,916 base pair nucleic acid fragment from Bacillus megaterium is disclosed. The fragment encodes five proteins, PhaP, PhaQ, PhaR, PhaB, and PhaC, shown or inferred to be involved in the biosynthesis of polyhydroxyalkanoate materials.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 30 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2002:140865 USPATFULL
TITLE: Vaccines comprising oil bodies
INVENTOR(S): Deckers, Harm M., Alberta, CANADA
Rooijen, Gijs Van, Alberta, CANADA
Boothe, Joseph, Alberta, CANADA
Goll, Janis, Alberta, CANADA
Moloney, Maurice M., Alberta, CANADA
Schryvers, Anthony B., Alberta, CANADA
Alcantara, Joenel, Alberta, CANADA
Hutchins, Wendy A., Alberta, CANADA

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002071846	A1	20020613
APPLICATION INFO.:	US 2001-880901	A1	20010615 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-577147, filed on 24 May 2000, PENDING Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, PATENTED Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, PATENTED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
	US 1997-47779P	19970528 (60)
	US 1997-47753P	19970527 (60)
	US 2000-212130P	20000616 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BURNS DOANE SWECKER & MATHIS L L P, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 10 Drawing Page(s)
LINE COUNT: 2348
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides novel adjuvants which comprise oil bodies. The invention also provides vaccine formulations comprising oil bodies and an antigen and methods for preparing the vaccines and the use of the vaccines to elicit an immune response.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 31 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2002:66652 USPATFULL
TITLE: Thioredoxin and thioredoxin reductase containing oil body based products
INVENTOR(S): Deckers, Harm M., Calgary, CANADA
Rooijen, Gijs van, Calgary, CANADA
Boothe, Joseph, Calgary, CANADA
Goll, Janis, Calgary, CANADA
Moloney, Maurice M., Calgary, CANADA
Dalmia, Bipin K., San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002037303	A1	20020328
APPLICATION INFO.:	US 2001-897898	A1	20010705 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-577147, filed on 24 May 2000, PENDING Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, GRANTED, Pat. No. US 6183762 Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, GRANTED, Pat. No. US 6146645

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-47753P	19970527 (60)
	US 1997-47779P	19970528 (60)
	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Stephen A. Bent, FOLEY & LARDNER, Washington Harbour, 3000 K Street, N.W., Suite 500, Washington, DC, 20007-5109
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 30 Drawing Page(s)
LINE COUNT: 3368
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in a variety of products including food products, personal care products and pharmaceutical products. In a preferred embodiment the emulsions comprise thioredoxin and/or thioredoxin reductase.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 32 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2002:291078 USPATFULL
TITLE: Polynucleotides and polypeptides derived from corn ear
INVENTOR(S): Lalgudi, Raghunath V., Clayton, MO, United States
Ito, Laura Y., Pleasanton, CA, United States
Sherman, Bradley K., Oakland, CA, United States
PATENT ASSIGNEE(S): Incyte Genomics, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6476212	B1	20021105
APPLICATION INFO.:	US 1999-313294		19990514 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-86722P	19980526 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Brusca, John S.
ASSISTANT EXAMINER: Moran, Marjorie A.
LEGAL REPRESENTATIVE: Incyte Genomics, Inc., Murry, Lynn E.
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 23084
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides purified, corn ear-derived polynucleotides (cdps) which encode corn ear-derived polypeptides

(CDPs). The invention also provides for the use of cdps or their complements, oligonucleotides, or fragments in methods for determining altered gene expression, to recover regulatory elements, and to follow inheritance of desirable characteristics through hybrid breeding programs. The invention further provides for vectors and host cells containing cdps for the expression of CDPs. The invention additionally provides for (i) use of isolated and purified CDPs to induce antibodies and to screen libraries of compounds and (ii) use of anti-CDP antibodies in diagnostic assays.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 33 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2002:122764 USPATFULL
TITLE: Nucleic acid molecules encoding human protease homologs
INVENTOR(S): Robison, Keith E., Wilmington, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6395889	B1	20020528	
APPLICATION INFO.:	US 1999-392184		19990909	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Achutamurthy, Ponnathapu
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Alston & Bird LLP
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 5266
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to polynucleotides encoding newly identified protease homologs. The invention also relates to the proteases. The invention further relates to methods using the protease polypeptides and polynucleotides as a target for diagnosis and treatment in protease-mediated disorders. The invention further relates to drug-screening methods using the protease polypeptides and polynucleotides to identify agonists and antagonists for diagnosis and treatment. The invention further encompasses agonists and antagonists based on the protease polypeptides and polynucleotides. The invention further relates to procedures for producing the protease polypeptides and polynucleotides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 34 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2002:81041 USPATFULL
TITLE: Products for topical applications comprising oil bodies
INVENTOR(S): Deckers, Harm M., Calgary, CANADA
van Rooijen, Gijs, Calgary, CANADA
Boothe, Joseph, Calgary, CANADA
Goll, Janis, Calgary, CANADA
Moloney, Maurice M., Calgary, CANADA
PATENT ASSIGNEE(S): SemBioSys Genetics Inc., Calgary, Alberta, CANADA (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6372234	B1	20020416	
APPLICATION INFO.:	US 2000-577147		20000524	(9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-448600, filed on 24 Nov 1999, now patented, Pat. No. US 6183762
Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998, now patented, Pat. No. US 6146645

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-75863P	19980225 (60)
	US 1998-75864P	19980225 (60)
	US 1997-47779P	19970528 (60)
	US 1997-47753P	19970527 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Dees, Jose' G.
ASSISTANT EXAMINER: Lamm, Marina
LEGAL REPRESENTATIVE: Bereskin & Parr, Gravelle, Micheline
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 2067
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provide novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in products for topical application to the skin. The products are very mild to the skin and may be easily formulated into a wide variety of personal care and dermatological products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 35 OF 52 PROMT COPYRIGHT 2004 Gale Group on STN

ACCESSION NUMBER: 2001:787866 PROMT
TITLE: SEMBIOSYS GENETICS INC.
SOURCE: PR Newswire, (30 Oct 2001) pp. 251.
PUBLISHER: PR Newswire Association, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 539
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB SEMBIOSYS GENETICS INC. RECEIVES US PATENT FOR ITS PLANT-BASED SOMATOTROPIN PRODUCTION TECHNOLOGY
THIS IS THE FULL TEXT: COPYRIGHT 2001 PR Newswire Association, Inc.

L68 ANSWER 36 OF 52 PROMT COPYRIGHT 2004 Gale Group on STN

ACCESSION NUMBER: 2001:833670 PROMT
TITLE: SemBioSys Genetics Inc. to Receive $5.5 Million From Technology Partnerships Canada.
SOURCE: PR Newswire, (13 Nov 2001) .
PUBLISHER: PR Newswire Association, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 422
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB Repayable Contribution Will Support Development of Company's Plant-Based
THIS IS THE FULL TEXT: COPYRIGHT 2001 PR Newswire Association, Inc.

L68 ANSWER 37 OF 52 PROMT COPYRIGHT 2004 Gale Group on STN

ACCESSION NUMBER: 2001:787364 PROMT
TITLE: SemBioSys Genetics Inc. Receives U.S. Patent for Its Plant-Based Somatotropin Production Technology.
SOURCE: PR Newswire, (30 Oct 2001) .
PUBLISHER: PR Newswire Association, Inc.
DOCUMENT TYPE: Newsletter
LANGUAGE: English
WORD COUNT: 527
FULL TEXT IS AVAILABLE IN THE ALL FORMAT
AB CALGARY, Alberta, Oct. 30 /PRNewswire/ --

THIS IS THE FULL TEXT: COPYRIGHT 2001 PR Newswire Association, Inc.

L68 ANSWER 38 OF 52 USPATFULL on STN DUPLICATE 9
ACCESSION NUMBER: 2001:200143 USPATFULL
TITLE: Method of delivering a benefit agent
INVENTOR(S): Howell, Steven, Sharnbrook, Great Britain
Little, Julie, Sharnbrook, Great Britain
Van Der Logt, Cornelis Paul, Vlaardingen, Netherlands
Parry, Neil James, Shambrook, Great Britain

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2001039250	A1	20011108	
	US 6642196	B2	20031104	
APPLICATION INFO.:	US 2000-742689	A1	20001220	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1999-310430	19991222

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: UNILEVER, PATENT DEPARTMENT, 45 RIVER ROAD, EDGEWATER, NJ, 07020
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 1417
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There is provided a method of delivering a benefit agent to a whereby a benefit agent is first loaded to a surface and subsequently unloaded and transferred and delivered to a second surface. More in particular, the benefit agent is first loaded onto a garment during a laundering process, and subsequently delivered to another surface. The benefit agents can be fragrance agents, perfumes, color enhancers, fabric softening agents, polymeric lubricants, photoprotective agents, latexes, resins, dye fixative agents, encapsulated materials, antioxidants, insecticides, soil repelling agents, soil release agents, and cellulose fibers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 39 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2001:231174 USPATFULL
TITLE: Protease homologs
INVENTOR(S): Robison, Keith E., Wilmington, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6331427	B1	20011218	
APPLICATION INFO.:	US 1999-280116		19990326	(9)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Murthy, Ponnathapu Achuta
ASSISTANT EXAMINER: Moore, William W.
LEGAL REPRESENTATIVE: Alston & Bird LLP
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 3346
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to polynucleotides encoding newly identified protease homologs belonging to the superfamily of G-protein-coupled proteases. The invention also relates to the proteases. The invention further relates to methods using the protease polypeptides and polynucleotides as a target for diagnosis and treatment in

protease-mediated disorders. The invention further relates to drug-screening methods using the protease polypeptides and polynucleotides to identify agonists and antagonists for diagnosis and treatment. The invention further encompasses agonists and antagonists based on the protease polypeptides and polynucleotides. The invention further relates to procedures for producing the protease polypeptides and polynucleotides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 40 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2001:209056 USPATFULL
TITLE: Polypeptides having choline oxidase activity and nucleic acids encoding same
INVENTOR(S): Yaver, Debbie, Davis, CA, United States
Berka, Randy M., Davis, CA, United States
Rey, Michael W., Davis, CA, United States
PATENT ASSIGNEE(S): Novozymes Biotech, Inc., Davis, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6320103	B1	20011120
APPLICATION INFO.:	US 2000-687298		20001012 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-443087, filed on 18 Nov 1999, now patented, Pat. No. US 6146864 Continuation of Ser. No. US 1998-199229, filed on 24 Nov 1998, now patented, Pat. No. US 6063607, issued on 16 May 2000
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Nashed, Nashaat T.
LEGAL REPRESENTATIVE: Starnes, Robert L.
NUMBER OF CLAIMS: 12
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1677
AB The present invention relates to **isolated** polypeptides having choline oxidase activity and **isolated** nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

L68 ANSWER 41 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2001:18010 USPATFULL
TITLE: Oil body based personal care products
INVENTOR(S): Deckers, Harm M., Calgary, Canada
van Rooijen, Gijs, Calgary, Canada
Boothe, Joseph, Calgary, Canada
Goll, Janis, Calgary, Canada
Moloney, Maurice M., Calgary, Canada
PATENT ASSIGNEE(S): Sembiosys Genetics Inc., Calgary, Canada (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6183762	B1	20010206
APPLICATION INFO.:	US 1999-448600		19991124 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-84777, filed on 27 May 1998

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-47753P	19970527 (60)
	US 1997-47779P	19970528 (60)
	US 1998-75863P	19980225 (60)

US 1998-75864P 19980225 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Dodson, Shelley A.
ASSISTANT EXAMINER: Lamm, Marina
LEGAL REPRESENTATIVE: Bereskin & Parr
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1774
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides novel emulsion formulations which comprise oil bodies. The invention also provides a method for preparing the emulsions and the use of the emulsions in various domestic and industrial compositions. The emulsions are especially suited for the preparation of food products, personal care products, pharmaceutical products and industrial products.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 42 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:900779 CAPLUS
DOCUMENT NUMBER: 134:52258
TITLE: Recombinant protein expression in plants as cellulose binding peptide fusion protein and **isolation** via **affinity** binding
INVENTOR(S): Shani, Ziv; Shoseyov, Oded
PATENT ASSIGNEE(S): Cbd Technologies Ltd., Israel; Yissum Research and Development Company of the Hebrew University of Jerusalem; Friedman, Mark, M.
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000077175	A1	20001221	WO 2000-US13434	20000517
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6331416	B1	20011218	US 1999-329234	19990610

PRIORITY APPLN. INFO.: US 1999-329234 A 19990610

AB A process of expressing a recombinant protein in a plant and of **isolating** the recombinant protein from the plant, is disclosed. The process consists of (a) providing a plant, a plant derived tissue or cultured plant cells expressing a fusion protein including the recombinant protein and a cellulose binding peptide being fused thereto, the fusion protein being compartmentalized within cells of the plant, plant derived tissue or cultured plant cells, so as to be sequestered from cell walls of the cells of the plant, plant derived tissue or cultured plant cells; (b) homogenizing the plant, plant derived tissue or cultured plant cells, so as to bring into contact the fusion protein with a cellulosic matter of the plant, plant derived tissue or cultured plant cells, to thereby effect **affinity** binding of the fusion protein via the cellulose binding peptide to the cellulosic matter, thereby obtaining a fusion protein cellulosic matter complex; and (c) **isolating** the fusion protein cellulosic matter complex. The recombinant protein can be released from

the fusion protein by proteolysis at the unique protease recognition sequence. A vector for expression of such fusion protein is claimed. Cellulose Binding Domains (CBDs) are independently folding protein modules that bind strongly to different forms of cellulose via non-**covalent** hydrophobic interactions. We have engineered a variety of bifunctional protein fusions which bind to cellulose and retain the function of the fusion partner. These proteins can be expressed in standard systems including microbial, insect, mammalian and plant cells. The presence of the CBD allows for highly efficient single-step **purifn**. and immobilization on cellulose from a variety of sources, including regenerated cellulose beads or even cell wall cellulose from a transgenic plant expressing the recombinant fusion protein. Here, we present data on the **purifn**. of CBDs and CBD-fusion proteins from transgenic potato (Solanum tuberosum cv Desiree). The proteins were **purified** either directly from the recombinant expression system or from the plant exts. into which they were spiked. CBDclos can be **purified** directly on cellulose beads or, in the case of cell wall cellulose, 500 mg of CBDclos protein can be **purified** on 1 g wet weight plant material. In the case of CBDTma, the CBD binds to exogenously added cellulose and can be eluted with disaccharides such as glucose or cellobiose. Alternatively, the fusion partner can be cleaved and **purified** away from the CBD, if a protease cleavage site has been engineered into the fusion protein.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 43 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:900778 CAPLUS
DOCUMENT NUMBER: 134:67153
TITLE: Recombinant protein expression in plants as cellulose binding peptide fusion protein and **isolation** via **affinity** binding
INVENTOR(S): Shani, Ziv; Shoseyov, Oded
PATENT ASSIGNEE(S): CBD Technologies Ltd., Israel; Yissum Research Development Company of the Hebrew University of Jerusalem
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000077174	A1	20001221	WO 2000-IL330	20000607
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6331416	B1	20011218	US 1999-329234	19990610
EP 1185624	A1	20020313	EP 2000-931527	20000607
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003502032	T2	20030121	JP 2001-503619	20000607

PRIORITY APPLN. INFO.: US 1999-329234 A 19990610
WO 2000-IL330 W 20000607

AB A process of expressing a recombinant protein in a plant and of **isolating** the recombinant protein from the plant, is disclosed. The process consists of (a) providing a plant, a plant derived tissue or cultured plant cells expressing a fusion protein including the recombinant

protein and a cellulose binding peptide being fused thereto, the fusion protein being compartmentalized within cells of the plant, plant derived tissue or cultured plant cells, so as to be sequestered from cell walls of the cells of the plant, plant derived tissue or cultured plant cells; (b) homogenizing the plant, plant derived tissue or cultured plant cells, so as to bring into contact the fusion protein with a cellulosic matter of the plant, plant derived tissue or cultured plant cells, to thereby effect **affinity** binding of the fusion protein via the cellulose binding peptide to the cellulosic matter, thereby obtaining a fusion protein cellulosic matter complex; and (c) **isolating** the fusion protein cellulosic matter complex. The recombinant protein can be released from the fusion protein by proteolysis at the unique protease recognition sequence. A vector for expression of such fusion protein is claimed. Cellulose Binding Domains (CBDs) are independently folding protein modules that bind strongly to different forms of cellulose via non-**covalent** hydrophobic interactions. We have engineered a variety of bifunctional protein fusions which bind to cellulose and retain the function of the fusion partner. These proteins can be expressed in standard systems including microbial, insect, mammalian and plant cells. The presence of the CBD allows for highly efficient single-step **purifn** . and immobilization on cellulose from a variety of sources, including regenerated cellulose beads or even cell wall cellulose from a transgenic plant expressing the recombinant fusion protein. Here, we present data on the **purifn**. of CBDs and CBD-fusion proteins from transgenic tobacco (Nicotiana tabaccum). The proteins were **purified** either directly from the recombinant expression system or from the plant exts. into which they were spiked. CBDclos can be **purified** directly on cellulose beads or, in the case of cell wall cellulose, 500 mg of CBDclos protein can be **purified** on 1 g wet weight plant material. In the case of CBDTma, the CBD binds to exogenously added cellulose and can be eluted with disaccharides such as glucose or cellobiose. Alternati vely, the fusion partner can be cleaved and **purified** away from the CBD, if a protease cleavage site has been engineered into the fusion protein.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 44 OF 52 USPATFULL on STN

ACCESSION NUMBER: 2000:153498 USPATFULL

TITLE: Polypeptides having choline oxidase activity and nucleic acids encoding same

INVENTOR(S): Yaver, Debbie, Davis, CA, United States
Berka, Randy M., Davis, CA, United States
Rey, Michael W., Davis, CA, United States

PATENT ASSIGNEE(S): Novo Nordisk Biotech, Inc., Davis, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6146864		20001114
APPLICATION INFO.:	US 1999-443087		19991118 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1998-199229, filed on 24 Nov 1998, now patented, Pat. No. US 6063607

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Nashed, Nashaat T.
LEGAL REPRESENTATIVE: Stames, Robert L., Lambins Esq., Elias, Zealson Esq., Steve
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1810
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to **isolated** polypeptides having choline oxidase activity and **isolated** nucleic acid sequences encoding the polypeptide from Fusarium venenatum. The invention also

relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 45 OF 52 USPATFULL on STN

ACCESSION NUMBER:	2000:149958 USPATFULL
TITLE:	Fatty acyl-CoA reductase
INVENTOR(S):	Somerville, Chris R., Portola Valley, CA, United States Reiser, Steven E., University City, MO, United States
PATENT ASSIGNEE(S):	The United States of America as represented by the United States Department of Energy, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6143538		20001107
APPLICATION INFO.:	US 1998-26482		19980219 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-38456P	19970220 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Achutamurthy, Ponnathapu
ASSISTANT EXAMINER:	Saidha, Tekchand
LEGAL REPRESENTATIVE:	Alwan, Joy A., Anderson, Thomas G., Moser, William R.
NUMBER OF CLAIMS:	16
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	8 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT:	1717

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A bacterial gene which encodes an enzyme that is an acyl-CoA reductase. The acyl-CoA reductase is able to chemically reduce acyl-CoAs to their corresponding alcohols, via aldehyde intermediates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 46 OF 52 USPATFULL on STN

ACCESSION NUMBER:	2000:77507 USPATFULL
TITLE:	Binary viral expression system in plants
INVENTOR(S):	Yadav, Narendra S., Chadds Ford, PA, United States
PATENT ASSIGNEE(S):	E. I. du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6077992		20000620
APPLICATION INFO.:	US 1998-178089		19981023 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-63504P	19971024 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	McElwain, Elizabeth F.
ASSISTANT EXAMINER:	Mehta, Ashwin D.
NUMBER OF CLAIMS:	22
EXEMPLARY CLAIM:	1,13
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT:	1791

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention relates to a regulated binary plant viral expression system. It is comprised of two chromosomally-integrated components. One component is a proreplicon, which contains cis-acting viral sequences

required for replication and a contains a target gene. The other component is a chimeric trans-acting replication gene comprising a regulated promoter operably-linked to the coding region for a viral replication protein. The proreplicon lacks the replication gene essential for replicon replication, and thus cannot undergo autonomous episomal replication. However, regulated expression of the trans-acting replication protein in plant cells also containing the proreplicon will trigger the release of free replicon from the integrated proreplicon, result in its episomal replication in trans, and result in the expression of the target gene, if present, through gene amplification. The expression system is useful for both production of foreign proteins as well as silencing endogenous genes and transgenes in plant tissue. Tissue-specific expression is controlled by the choice of promoter controlling the transcription of the trans-acting replication gene.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 47 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2000:61423 USPATFULL
TITLE: Polypeptides having choline oxidase activity and nucleic acids encoding same
INVENTOR(S): Yaver, Debbie S., Davis, CA, United States
Berka, Randy M., Davis, CA, United States
Rey, Michael W., Davis, CA, United States
PATENT ASSIGNEE(S): Novo Nordisk Biotech, Inc., Davis, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6063607		20000516
APPLICATION INFO.:	US 1998-199229		19981124 (9)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Nashed, Nashedd
LEGAL REPRESENTATIVE: Zelson Esq., Steve, Starnes, Robert L.
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 1776
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to **isolated** polypeptides having choline oxidase activity and **isolated** nucleic acid sequences encoding the polypeptides. The invention also relates to nucleic acid constructs, vectors, and host cells comprising the nucleic acid sequences as well as methods for producing and using the polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L68 ANSWER 48 OF 52 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-399905 [34] WPIDS
DOC. NO. CPI: C2000-120734
TITLE: New composition for improved topical delivery of an active agent comprising an active agent and oil bodies and reduced irritability.
DERWENT CLASS: B04 D16 D21
INVENTOR(S): BOOTHE, J; JUNGERMANN, E; MOLONEY, M M
PATENT ASSIGNEE(S): (SEMB-N) SEMBIOSYS GENETICS INC
COUNTRY COUNT: 91
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000030602	A1	20000602	(200034)*	EN	50

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES

FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL
TJ TM TR TT UA UG US UZ VN YU ZA ZW
AU 2000013700 A 20000613 (200043)
EP 1131047 A1 20010912 (200155) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI
MX 2001005276 A1 20020501 (200368)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000030602	A1	WO 1999-CA1138	19991124
AU 2000013700	A	AU 2000-13700	19991124
EP 1131047	A1	EP 1999-972527	19991124
		WO 1999-CA1138	19991124
MX 2001005276	A1	WO 1999-CA1138	19991124
		MX 2001-5276	20010525

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000013700	A	Based on	WO 2000030602
EP 1131047	A1	Based on	WO 2000030602
MX 2001005276	A1	Based on	WO 2000030602

PRIORITY APPLN. INFO: US 1998-109997P 19981125
AN 2000-399905 [34] WPIDS
AB WO 200030602 A UPAB: 20000718
NOVELTY - A composition (I) for the improved topical delivery of an agent is new and comprises:
(1) an active agent; and
(2) oil bodies.
DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for the preparation of the composition (I).
USE - The composition (I) is useful for preparation of a medicament for the topical delivery of an active agent to a living organism (claimed), especially topical formulations for beautifying the skin or for treating skin conditions.
ADVANTAGE - The oil bodies enhance the percutaneous absorption or penetration of the active agent and the oil bodies reduce the irritability to the skin of the active agent (claimed).
Dwg.0/4

L68 ANSWER 49 OF 52 IFIPAT COPYRIGHT 2004 IFI on STN DUPLICATE 10
AN 03094135 IFIPAT;IFIUDB;IFICDB
TITLE: **OIL BODIES** AND ASSOCIATED **PROTEINS** AS **AFFINITY** MATRICES; **SEPARATION** OF TARGET **MOLECULES** FROM MIXTURE
INVENTOR(S): van Rooijen, Gijs, Calgary, CA
Boothe, Joseph, Calgary, CA
Moloney, Maurice, Calgary, CA
PATENT ASSIGNEE(S): Sembiosys Genetics Inc., Calgary, CA
PRIMARY EXAMINER: Grimes, Eric
AGENT: Bereskin & Parr

	NUMBER	PK	DATE
PATENT INFORMATION:	US 5856452	A	19990105
	(CITED IN 002 LATER PATENTS)		
APPLICATION INFORMATION:	US 1996-767026		19961216
EXPIRATION DATE:	16 Dec 2016		
FAMILY INFORMATION:	US 5856452		19990105

DOCUMENT TYPE: Utility
FILE SEGMENT: CHEMICAL
GRANTED
MICROFILM REEL NO: 008441 FRAME NO: 0277
NUMBER OF CLAIMS: 25
GRAPHICS INFORMATION: 17 Drawing Sheet(s), 17 Figure(s).

AB A method for the **separation** of a target **molecule** from a mixture is described. The method employs **oil bodies** and their associated **proteins** as **affinity** matrices for the selective, non-**covalent** binding of desired target **molecules**. The **oil body proteins** may be genetically fused to a **ligand** having specificity for the desired target **molecule**. Native **oil body proteins** can also be used in conjunction with an **oil body protein** specific **ligand** such as an antibody or an **oil body** binding **protein**. The method allows the **separation** and recovery of the desired target **molecules** due to the difference in densities between **oil bodies** and aqueous solutions.

CLMN 25
GI 17 Drawing Sheet(s), 17 Figure(s).

L68 ANSWER 50 OF 52 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:424269 CAPLUS
DOCUMENT NUMBER: 129:92578
TITLE: **Oil bodies** and associated **proteins** as **affinity** matrixes
INVENTOR(S): Moloney, Maurice; Boothe, Joseph; Van Rooijen, Gijs
PATENT ASSIGNEE(S): Sembiosys Genetics Inc., Can.; Moloney, Maurice; Boothe, Joseph; Van Rooijen, Gijs
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9827115	A1	19980625	WO 1997-CA951	19971205
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5856452	A	19990105	US 1996-767026	19961216
AU 9852204	A1	19980715	AU 1998-52204	19971205
AU 739339	B2	20011011		
BR 9713727	A	20000125	BR 1997-13727	19971205
CN 1245503	A	20000223	CN 1997-181507	19971205
EP 1007554	A1	20000614	EP 1997-946991	19971205
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001506241	T2	20010515	JP 1998-527134	19971205
NZ 336558	A	20010831	NZ 1997-336558	19971205
ZA 9711237	A	19980706	ZA 1997-11237	19971215
MX 9905596	A	20001130	MX 1999-5596	19990616
US 6509453	B1	20030121	US 1999-319275	19990827
US 2003059910	A1	20030327	US 2002-260960	20021001
US 2003096320	A1	20030522	US 2002-260562	20021001

PRIORITY APPLN. INFO.: US 1996-767026 A2 19961216
WO 1997-CA951 W 19971205
US 1999-319275 A1 19990827

AB A method is described for the **sepn**. of a target mol. from a mixture The method employs **oil bodies** and their associated **proteins** as **affinity** matrixes for the selective, non-**covalent** binding of desired target **mols**. The **oil body proteins** may be genetically fused to a **ligand** having specificity for the desired target **mol** . Native **oil body proteins** can also be used in conjunction with an **oil body protein** -specific **ligand** such as an antibody or an **oil body** binding **protein**. The method allows the **sepn**. and recovery of the desired target **mols**. due to the difference in densities between **oil bodies** and aqueous solns.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L68 ANSWER 51 OF 52 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
DUPLICATE 11

ACCESSION NUMBER: 1998:160920 BIOSIS
DOCUMENT NUMBER: PREV199800160920
TITLE: Characterization of the oligomeric behavior of a 16.5 kDa peanut oleosin by chromatography and electrophoresis of the iodinated form.
AUTHOR(S): Pons, Laurent; Olszewski, Agnes; Gueant, Jean-Louis [Reprint author]
CORPORATE SOURCE: Lab. Pathol. Cell. Mol. Nutr., EP CNRS 0616, Fac. Med., B.P. 184, 54505 Vandoeuvre-les-Nancy Cedex, France
SOURCE: Journal of Chromatography B, (Feb. 27, 1998) Vol. 706, No. 1, pp. 131-140. print.
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AB Oleosins are amphipathic **proteins** associated with **oil bodies** in seeds. We **purified** the major 16 500 peanut oleosin by preparative SDS-PAGE. Autoradiography after SDS-PAGE **separation** of the iodinated oleosin revealed **covalently** bound oligomers with Mr of 21 000, 33 000, 44 000 and 51 000. The strong capacity of these oligomers to form aggregates and to be incorporated into large-sized detergent micelles was demonstrated by gel permeation and isoelectric focusing. A 50% ethanol concentration was necessary to elute the 16 500 oleosin from octyl groups in hydrophobic interaction chromatography showing its natural tendency to interact with lipid acyl chains. This oligomerization behavior in aqueous solution is an indirect reflection of the interactions that occur in the oil body.

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TITLE: **Isolation** and characterization of a proteolipid in defatted rice bran.
AUTHOR: Sridhara, S.
CORPORATE SOURCE: Biophysical Chem. Sect., Dep. of Food Chem., Cent. Food Tech. Res. Inst., Mysore, India
SOURCE: Nahrung, (1989) 33 (6) 565-573, 22 ref.
ISSN: 0027-769X
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SUMMARY LANGUAGE: German; Russian

AB A proteolipid, **isolated** from defatted rice bran by the method of Folch et al. [Journal of Biological Chemistry (1957) 226, 497] (a mild method involving shaking a chloroform/methanol, 2:1 v/v, extract of rice bran with 1% w/v NaCl solution and collecting the fluffy layer at the interface), had a lipid:**protein** ratio of 1:1.8. The proteolipid contained 3.3% carbohydrate and 4.1% P (dry weight basis), and the apoprotein contained 3.6% carbohydrate but no P. The proteolipid was shown by PAGE to

contain 2 **protein** components, one of which was more tightly bound than the other to the lipid moiety. 4 major **protein** bands appeared on SDS-urea PAGE, with apparent mol. weight of 62 000, 30 000, 21 000 and 14 000. The apoprotein was hydrophobic and contained 57.6% apolar, 16.3% acidic and 10.2% basic amino acids. The lipid moiety consisted of 62.9-74.4% phospholipids, 15.4-25.8% glycolipids and 10.3-11.2% neutral lipids. The interaction between **protein** and lipid is ascribed to hydrophobic and electrostatic bonds, and not to a **covalent** bond, since lipids were easily **separated** from the proteolipid by lyophilizaiton followed by solvent extraction. The proteolipid was assumed not to be an artefact of **isolation**, but to be a component of the membranes that surround **oil bodies**.

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